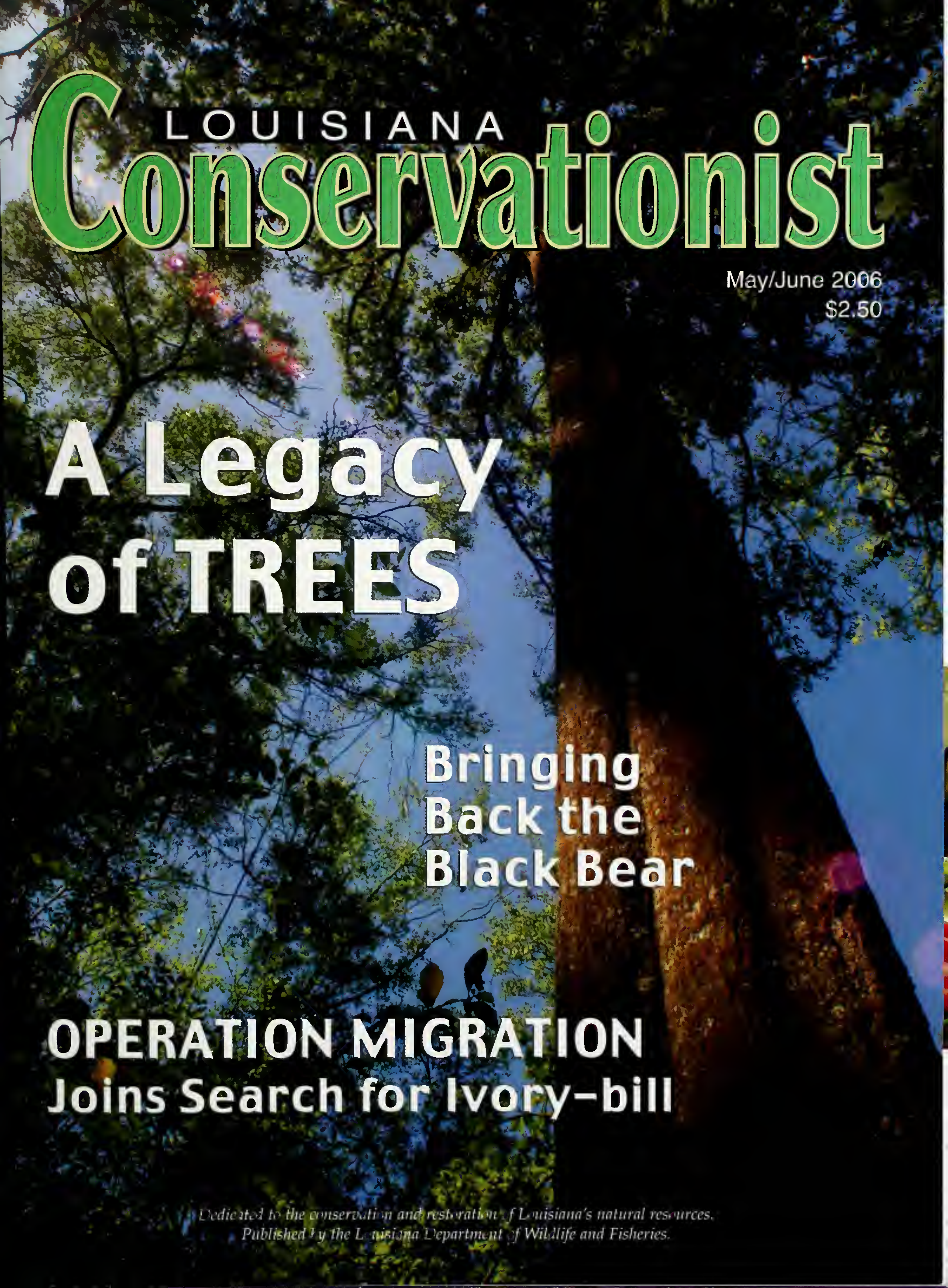

LOUISIANA Conservationist

May/June 2006
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Bringing Back the Black Bear

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Comments

Dwight Landreneau, Secretary

If you have not had a chance to use the redesigned Department of Wildlife and Fisheries Web site, I urge you take a look. The web address is still *www.wlf.louisiana.gov*, but the new features include a more user-friendly design to assist your search efforts and improved speed from page to page.

Although the project was delayed by the 2005 hurricane season, I commend the design team and review committee for their efforts to improve LDWF's primary information source. I invite you to let us know what you think in the "Comments" section of the site.

Another topic I am constantly asked about is the department's hurricane recovery work. Within the Office of Wildlife, timber salvage efforts on wildlife management areas in St. Tammany and Washington parishes will improve habitat conditions, facilitate hunter access and reduce fire hazards. Along the coast, wildlife management area and refuge facilities are undergoing assessment and planning designed to bring them back to pre-storm conditions. Both divisions are evaluating, documenting and managing habitats for optimal wildlife recovery.

The Marine Fisheries Artificial Reef Program is determining which oil and gas platforms destroyed by the hurricanes may be converted to artificial reefs for fish habitat. Damaged platforms present potential hazards to navigation, and meetings with the U.S. Minerals Management Service, U.S. Army Corps of Engineers, and oil and gas production companies will determine the final disposition of these obstructions.

Fisheries staff has also requested and shrimpers have received temporary exemptions from federal turtle excluder device (TED) regulations following hurricanes Katrina and Rita. Administrators have provided testimony during legislative and congressional tours and hearings regarding storm impacts to Gulf of Mexico and Louisiana fisheries. Inland Fisheries biologists continue to survey freshwater rivers and bayous for restocking efforts where storm impacts were most severe.

The Enforcement Division has completed post-hurricane reports detailing strengths and weaknesses in preparation for the 2006 hurricane season. Solidifying agreements with in-state and out-of-state agencies regarding search and rescue capabilities has been a priority. Their support improved the department's scope of coverage for search and rescue missions in 2005 and may be needed in future storm scenarios.

All LDWF enforcement agents have completed basic National Incident Management System courses and are scheduling additional Search and Rescue (SAR) training. Enforcement Division supervisory personnel submitted revised SAR plans to the Governor's Office of Homeland Security and Emergency Preparedness based on the extensive knowledge gained in 2005. These written plans will facilitate rapid deployment to future disaster locations and enable us to provide better medical aid and more rapid transport of victims to shelters and evacuation points.

The department will continue to support the efforts of Governor Blanco, the Louisiana Recovery Authority and parish officials. The rebuilding process is moving forward and will continue through the next hurricane season. We must and will stay prepared—and hope for reduced storm activity in the gulf this year and the years ahead.

Louisiana Conservationist
ISSN 0024-6778
Volume 59, No. 3
Baton Rouge, LA 70808

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Louisiana Conservationist (USPS #320-300) is published bimonthly by the Louisiana Department of Wildlife and Fisheries, 2000 Quail Drive, Baton Rouge, LA 70808, 225/ 765-2918. Periodical postage paid at Baton Rouge, LA and additional mailing offices. POSTMASTER: send address changes to Louisiana Conservationist, P.O. Box 98000, Baton Rouge, LA 70898.

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This public document was published at an average cost of $11,539.39. Approximately 18,650 copies of this document were published at an average printing cost of $11,539.39. The total cost of all printing of this document averages $11,539.39. This document was published for Department of Wildlife and Fisheries, 2000 Quail Drive, Baton Rouge, Louisiana, 70808, by LSU Graphic Services, to provide information on outdoor opportunities in Louisiana. This material was printed in accordance with the standards for printing by state agencies established pursuant to R.S. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of the Louisiana Revised Statutes.

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LOUISIANA
Conservationist

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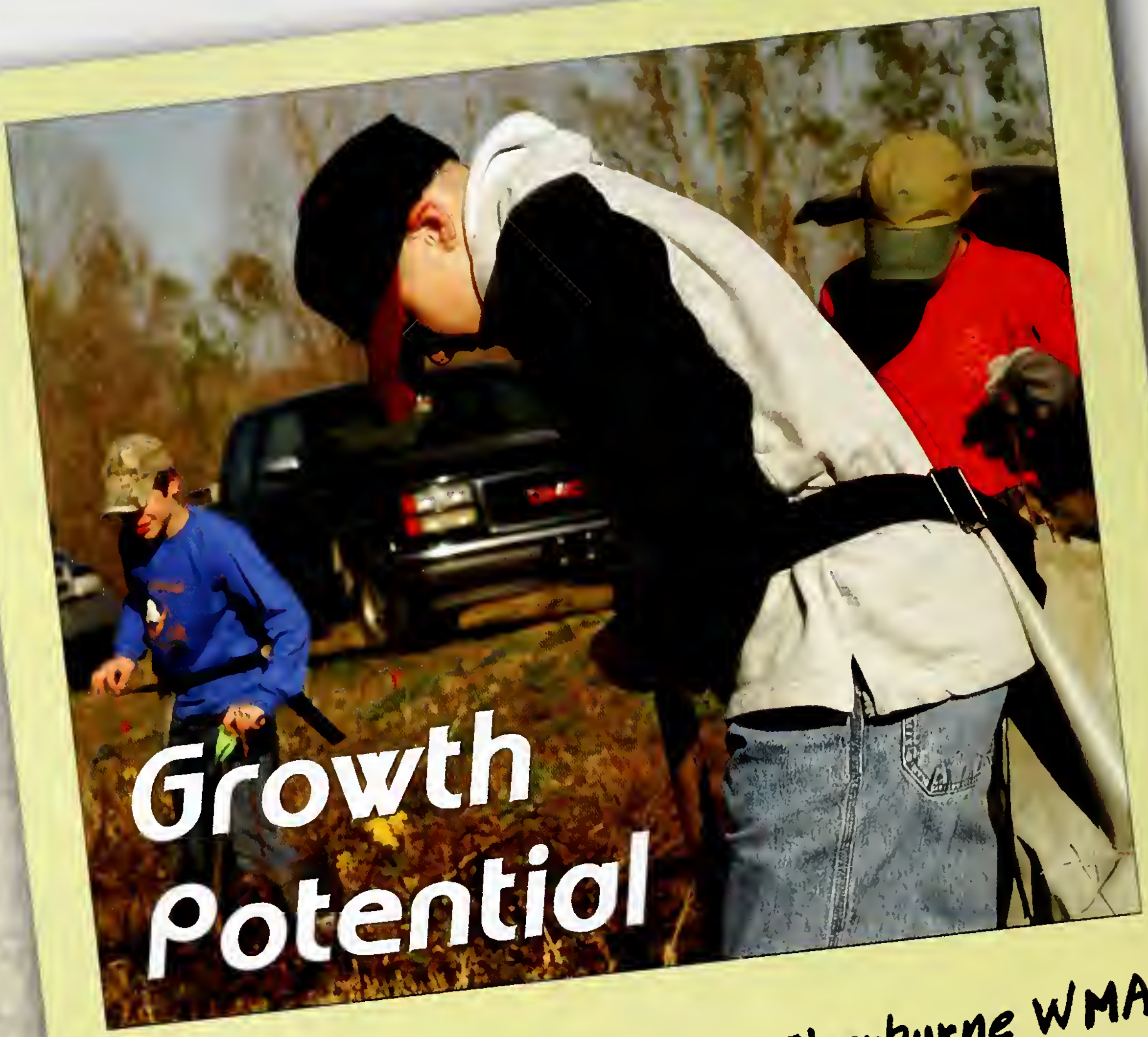
Published by the Department of Wildlife and Fisheries in the interest of conservation of Louisiana natural resources.



Growth Potential

Scouts and Seedlings on Sherburne WMA

Story by
Joel COURTNEY
and Jill WILSON

Photos by
Joel COURTNEY

The sun glows through the scattered clouds on a brisk Saturday morning in South Louisiana. It's just after 8 a.m. and a chilly wind whips across a bare plot of land on the South Farm portion of Sherburne Wildlife Management Area (WMA).

Phil Dupre assists his son Will as he practices using the dibble.

Gathered around the bed of a pick-up truck parked along the edge of the plot are six Boy Scouts from Troop 165 out of Opelousas, clad in sweatshirts, blue jeans and rubber boots, the kind of clothes you're likely to wear for a day of laborious outdoor work. At a time of morning when many kids their age are still in bed, these boys have traveled to Sherburne WMA to volunteer their energies and time on a meaningful service project. By the end of the day, this bare plot of land will be filled with hundreds of tree seedlings that will one day grow to provide beneficial wildlife habitat.

Steve Stone with the U.S. Army Corps of Engineers (USACE)) and Tony Vidrine, a biologist with the Louisiana Department of Wildlife and Fisheries (LDWF), explain the process of planting seedlings to the boys. They give detailed demonstrations, poking the long metal planting tool called a "dibble" into the muddy ground and securing a slender tree seedling. The boys are eager to get started with the task as they are given their own dibbles and fitted with seedling bags. They aim to plant 1,200 trees covering roughly five acres by day's end, but the boys appear undaunted by the numbers. Their goal is to complete the task no matter how long it takes or how muddy they get.

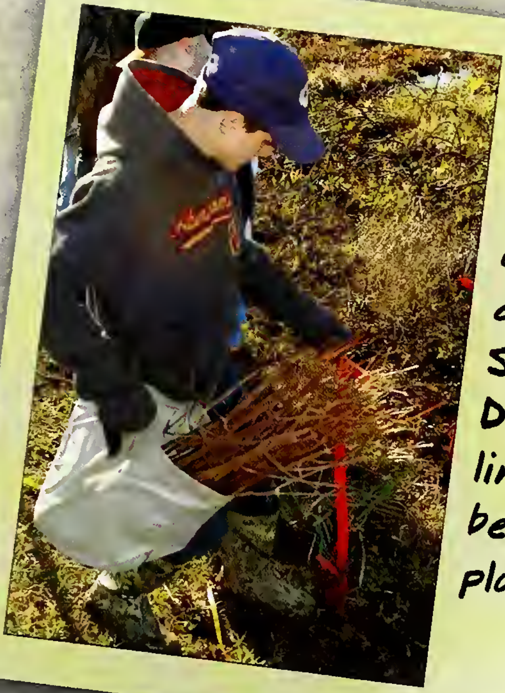
The property the boys will work is owned by the USACE and managed by LDWF. The land was once rich with forest habitat, but was cleared in an attempt to convert it to agriculture. The department has taken on the task of returning these lands back to their original forest landscape.

The particular plot being planted this day doesn't hold water like much of South Farm, making it suitable for new trees. Ideally, these trees will provide important habitat for wildlife in the area, especially deer. Additionally, the shade the trees provide in the summer will be beneficial to crawfish. The USACE assisted with the project by providing the trees, primarily bald cypress as well as a number of other species including green ash, live oak and bitter pecan. Stone was also on hand to provide assistance with supervision of the planting process.

Aaron Dugas, 17, in fulfillment of his service project requirements for the Scouts, coordinated Troop 165's involvement in the project.

"I'm working toward my Eagle rank and in order to do that you have to perform a service project that helps the community in some way," said Aaron as he documented the event by snapping pictures with a digital camera.

Aaron and five of his fellow scouts from Troop 165—Shannon Dohman, Will Dupre, Tyler Faul, Matt Pavy and Logan Whip—get their final instructions from Steve and Tony and begin the day-long task of planting hun-



Armed with a bag of seedlings and a dibble, Shannon Dohman lines up to begin the planting.

Matt Pavy digs into the soil. Holes for the seedlings must be deep enough to cover all of their roots.

dreds of tiny seedlings.

The boys, who range in age from 11 to 17, stand abreast, 12 feet apart. The process begins when the first boy drives his dibble into the ground, rocking it back and forth to create a small hole that will house the new seedling. In moments the sounds of dibbles piercing the muddy ground and the boys' idle chatter fill the chilly air.

The boys watch one another as they walk and plant, trying to maintain straight lines across the area. Stone and Vidrine keep a close eye on their techniques, occasionally stopping to tug on a tree, checking that it's secure in its hole. Aaron, hobbled by a foot injury from a recent soccer game, follows the boys closely, occasionally redirecting a straying planter.

Considering their novice status, the boys move pretty quickly, in part thanks to the moisture in the ground. It not only keeps them from wearing out too quickly, but also helps with survival of the seedlings. If the roots stay moist until the leaves flush out, the trees will have a better chance of surviving to maturity.

Vidrine himself is no stranger to tree planting. He has participated in numerous tree plantings from his days in forestry and wildlife school to the planting of Russell Sage WMA during his early years with the department. As he watches the boys energetically plant their rows of seedlings, Tony recalls an experience with tree planting that goes back even farther than his days in wildlife school. Tony was once a Boy Scout himself and his troop participated in a planting at Camp Thistlewaite.

"I must've been 10 or 11 years old," recalls Tony, "about the same age as these kids that are out here planting today."

Tony's experience planting trees as a youth fosters an understanding of how involvement in such programs can profoundly impact one's life down the road.

"You can go back 10, 15, even 30 years later and look at these trees and they'll be a pretty good size," said Tony. "It's just gratifying to go back, years later, and see something you did that was so constructive and beneficial to the natural resources."

Tony's message of future benefits is not lost on young Aaron Dugas. "It feels great to know that years from now, I can go back and see all the grown trees and know that it provided a new habitat for wildlife," said Aaron. "To know that people can enjoy this area we're planting by hunting, bird watching, or whatever. I feel proud to know that I've contributed to that."

After preparing the hole, Will Dupre carefully reaches for one of the 1,200 seedlings to be planted on the South Farm area.

As the boys move further down the line, Steve Stone and two of the Scout's fathers, Phil Dupre and Charlie Dugas, begin to fashion protectors for the seedlings. They roll several sheets of light-blue plastic into narrow tubes, which fit securely over the seedlings, helping protect them from rats and rabbits. They make quick work of the task and soon the once bare plot is peppered with blue plastic.

The troop works as a cohesive unit as they plant the seedlings, showing patience and endurance. Their task is an important one and they treat it with due respect; however boys will be boys.

"We had a good time, we enjoyed ourselves. Joking around and having fun," said Aaron. "Sometimes one of the guys would go off course, trying to walk a straight line, and we'd joke about that. Being outside, enjoying nature, getting muddy and stuff like that was great."

The department offers numerous opportunities for youth to get involved in outdoor projects. One need only contact their regional office to learn about the various programs and events that are suitable for youth volunteers. The department has facilitated youth volunteers on projects such as the tree planting on Sherburne to the refurbishment of nature trails and the construction and installation of wood duck boxes on WMAs.

LDWF's Tony Vidrine gives the seedlings a light tug to ensure that they are planted properly.

> *"It's gratifying to go back, years later, and see something you did that was so beneficial..."* — TONY VIDRINE

LDWF and YOUth...

Want to introduce your youngster to the great outdoors? LDWF has a variety of opportunities for youth involvement that guarantee a world of learning and lots of fun.

Aquatic Education—

Fishing clinics, classroom programs and more! For information, contact Angela Capello at 318/748-6999 or *capelloa@centurytel.net.*

Waddill Refuge—

Outdoor recreation center in Baton Rouge—fishing, hiking and more! Open 8-5 Tues.-Sat. and 9-5 Sun. Call Wayne Huston at 225/274-8089.

LDWF Library—

A great source of information for reports and school projects. Open 8-4:30 Mon.-Fri. at LDWF headquarters in Baton Rouge. Call 225/765-2934.

F.U.N. Camps—

Families Understanding Nature camps for parents and kids. To register, contact Mike Burns at 318/484-2212 or *burns_m@centurytel.net.*

Hunter Education—

For more information on requirements and schedules, visit *wlf.louisiana.gov* or contact John Sturgis at 225/763-5448 or *jsturgis@wlf.louisiana.gov.*

NHFD Volunteers—

National Hunting and Fishing Day is the 4th Saturday in September. Contact LDWF Public Information at 225/765-2934 to volunteer your group!

Overall, the department views youth involvement as a win-win situation.

"It benefits us (the department) by reducing the need for manpower on projects such as the tree planting and at the same time it benefits the kids by giving them a meaningful service project," said Vidrine.

If an individual youth or youth group has an interest in the outdoors, department programs are a positive way to get involved and better understand wildlife management.

"I'm not a big video gamer," says Aaron. "I'm really interested in the outdoors. When I have kids, I'd like to get them interested in hunting and enjoying nature."

Part of that introduction to the outdoors will undoubtedly, years from now, involve a trip to Sherburne WMA and a plot of land that will ideally be rich with healthy and maturing trees of various species.

"It's definitely something I would show my kids," said Aaron. "Hopefully, they'll appreciate it as much as I have and as much as I will."

As the scouts make their way, plastic cylinders are applied to protect the seedlings until they take root.

"To know that people can enjoy this area... I feel proud that I've contributed to that." —AARON DUGAS

An employee of seven years, Joel Courtney is the Audio/Visual Production Manager for the Louisiana Department of Wildlife and Fisheries. Jill Wilson is the editor of Louisiana Conservationist.

LDWF Forestry Facts...

- LDWF's WMA forest management program focuses on maintaining and enhancing the forest resources for wildlife benefits.
- There are approximately 490,000 acres in LDWF's forest management program, encompassing 33 WMAs.
- Approximately 25,000 acres of agricultural land has been converted back to forest on WMAs.
- Red River WMA was the site of LDWF's first forest restoration project, with 660 acres of agricultural land reforested between 1967 and 1973.
- Afforestation (converting agricultural land back to forest) became an annual event on WMAs beginning in 1984 on Ouachita WMA.
- Since 1984, LDWF has averaged 1,200 acres of afforestation per year on WMAs.

Species Profile:

Diamondback Terrapin

Malaclemys terrapin

Story and Photo by
***Jeff* BOUNDY, Ph. D.**

The diamondback terrapin, once harvested by the tens of thousands, remains one of Louisiana's least known turtles. Terrapins exist in the twilight world of the outer marshes—difficult to reach, improbable to see, and illegal to trap. The few who are blessed with a glimpse of these turtles usually see nothing more than a gray head briefly breaking the surface. However, once in hand, a terrapin is a delightful vision—a shell pattern composed of concentric rings and a pale gray skin covered with black spots. The males are graced with a black "mustache" on the upper jaw.

Terrapins live only in brackish and saltwater marshes, from Cape Cod, Mass., to Corpus Christi, Texas, in the narrow zone between fresh water and the open ocean that has salinities of 11 to 32 parts per thousand. They feed on saltwater snails, small crabs and bivalves. Adult terrapins possess abnormally large jaws, which enable them to crush the shells of clams. Sadly, it is their feeding habits that are suspected to have lead to the extirpation of terrapins in some areas. Terrapins seemingly cannot resist crab pots, and because they cannot escape the traps, they drown.

The delectable flesh of terrapins created a demanding market in the early 1900s that resulted in an extensive fishery, followed by attempts to farm the turtles. In 1944, nearly 50,000 pounds of terrapins were sold from Louisiana waters at 25 cents per pound. In 1947, the Louisiana Department of Wildlife and Fisheries (LDWF) released 1,400 baby terrapins in Louisiana, as part of a fledgling restocking program. However, the wild harvest and farming of terrapins were negligible by the 1960s. In order to manage the wild populations, the state Legislature passed a law prohibiting the take of terrapins with traps, prohibiting shipment from mid-April to mid-June, and mandated a minimum six-inch plastron (undershell) length.

Fishermen occasionally take a few terrapin as offcatch in their nets, and are of the opinion that groups of terrapins migrate from bay to bay. Colonies of terrapins can number upwards to 30 per acre of open water in favorable conditions. Terrapins dig nests in beach lines, dredge lines and leveed roads usually from May to July. Females lay an average of six or seven eggs per nest and often nest twice in a year. The eggs hatch in 60 to 75 days. For several years, the hatchlings disappear into the marshes, avoiding open water. What these youngsters do until sexual maturity remains a mystery, but they reappear in the bays as young adults.

Diamondback terrapins are difficult to monitor. LDWF has trawl data, which include terrapin counts, dating back to the 1960s. However, so few terrapins are netted that it has been impossible to draw conclusions about population trends, movements and habitat preferences. Scientists from 17 Atlantic coastal states meet each year to share data and plan inventories of terrapin populations. The plan for Louisiana is to develop reliable survey techniques and begin tracking our terrapin populations.

HAVE YOU EVER SEEN A DIAMONDBACK TERRAPIN?

Since diamondback terrapins are usually found in salt marshes or mangrove swamps of the eastern United States, you may have useful information to contribute to a study on the diamondback terrapin's past and current distribution. If you have ever seen a diamondback terrapin in the wild, fill out an online survey at *www.people.hofstra.edu/terrapin*. Paper versions are available from the address below.

For more information, contact Dr. Russell Burke at *biorlb@hofstra.edu* or at Department of Biology, 114 Hofstra University, Hempstead, NY 11549, 516/463-5521.

SETTLING IN...

Story by
Dave TELESCO

Repatriated Bears Finding Success

The Louisiana black bear (*Ursus americanus luteolus*) was listed as a threatened subspecies under the Endangered Species Act in 1992. In order for the bear to recover, the currently isolated bear populations need to be connected. This interaction is difficult because much of the bottomland hardwood forests in which bears live have been lost. Those forests that have not been completely lost are reduced to many small woodlots across eastern Louisiana. While male black bears are famous for their ability to range across vast areas, females are reluctant to cross open areas without forest to conceal their movements. This reluctance has prompted biologists to practice repatriation, a process that involves moving bears from existing populations to forests where bears are rare or absent. The goal of repatriation is to establish a new subpopulation between existing populations to encourage genetic exchange.

Photo by Frank van Manen

Like this female and her cub, the majority of Louisiana black bears in northern Louisiana den in tree cavities.

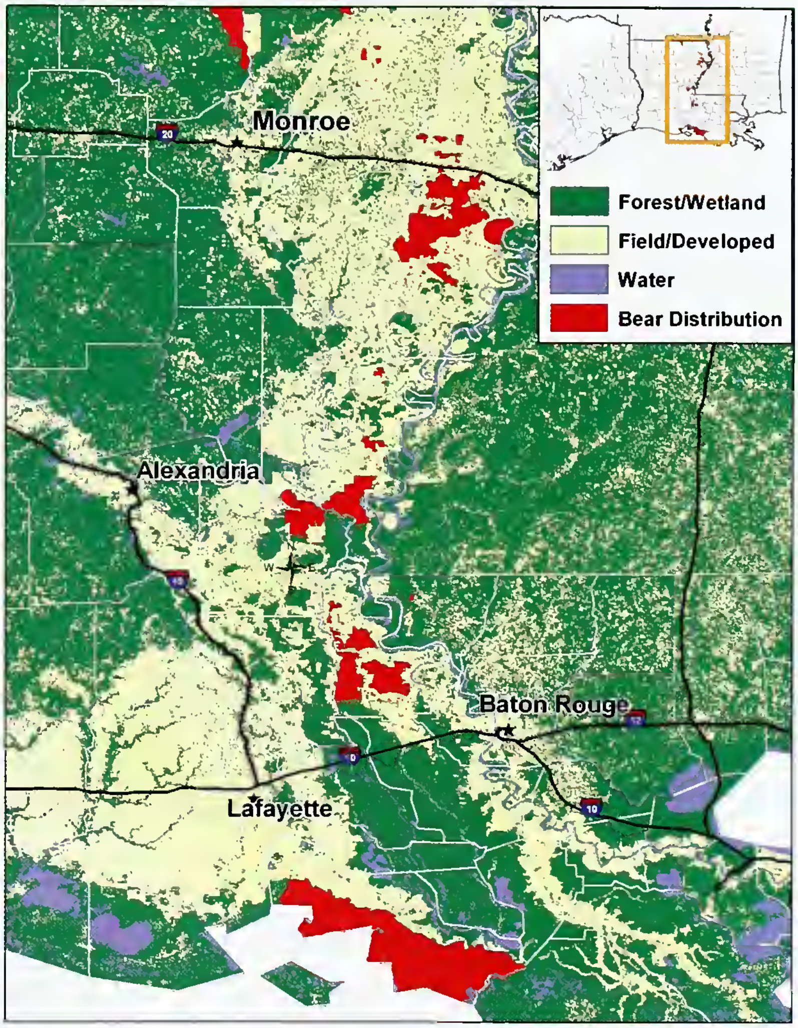
REPATRIATION: Moving bears from existing

Moving bears from one area to another is no easy task, and getting them to stay where you put them is even more difficult. Bears have a remarkable homing instinct and quite often range far and wide after they are moved, but researchers think they have finally developed a method that will work. Adult females with newborn cubs are moved from their winter dens to artificial dens in a new area. Those females are more likely to stay in the new areas because their young cubs cannot travel long distances. By the time the cubs are old enough to travel, the adult females have lost interest in moving. Once females become established in an area, males show up on their own in their search for mates and set up their own home ranges.

The repatriation project is a true team effort. The Black Bear Conservation Committee (BBCC), Louisiana Department of Wildlife and Fisheries (LDWF), U.S. Fish and Wildlife Service, Arkansas Game and Fish Commission, Louisiana State University (LSU), and University of Tennessee formed the Louisiana Repatriation Team. The team decided the best area to establish a new bear population would be in the conjunction of lower Concordia, eastern Avoyelles, western West Feliciana, and upper Pointe Coupee parishes. Called the Three Rivers Complex, the area contains roughly 105,000 acres of public land found in Lake Ophelia National Wildlife Refuge (NWR), and Grassy Lake, Red River, Spring Bayou, and Three Rivers wildlife management areas. The area also contains over 50,000 acres of privately-owned woodlands and many other properties being voluntarily restored to forests. Those private lands help tie the existing wooded tracts together.

Before the team made a final decision on repatriation, they held meetings in and around the Three Rivers Complex to discuss the plan with the public. Landowners and local officials were very supportive of repatriation and the overall bear recovery effort. To make the restoration effort a true success, the team actively engages local communities in bear recovery.

The repatriation methods were tested out in 1998 and 1999. Each year, a female and her cubs were taken from winter dens on private lands north of Tensas River NWR and moved to the southern portion



Louisiana black bear populations (red) are found in isolated forest patches across eastern Louisiana, including the recently established population in the repatriation area.

ations to forest patches where bears are rare or absent.

RESTORE THE BEAR

For more information

Photo courtesy of Black Bear Conservation Committee

Females with young are more likely to stay in these new areas because their cubs cannot travel long distances when they first emerge from their winter dens. Cubs moved on this project will bolster recovery efforts and help restore the bear.

of the refuge (see *Louisiana Conservationist*, May/June 1999). Those moves gave more evidence to support a more extensive repatriation effort to establish a bear population in east-central Louisiana. Between 2001 and 2006, a total of 30 adult females and 69 cubs were moved from in and around Tensas River NWR to the Three Rivers Complex. The females have been monitored extensively and most have stayed in and around the Three Rivers Complex. As a further indication of success, adult bears have been captured in the repatriation area that had been moved there as cubs.

Two events during the repatriation effort have been exceptionally rewarding. In 2005, the first "natural" reproduction of the Louisiana repatriation project was documented. A female moved in 2003 raised her four cubs in the Three Rivers Complex, mated with a male in West Feliciana Parish, and had a record five-cub litter in Wilkinson County, Miss. "This is what we were hoping to find," says Paul Davidson, BBCC executive director, adding, "We don't move adult males...we don't have to. If you bring the females, the males will come." In 2006, five more previously repatriated females were found with new cubs in and around the Three Rivers Complex, further indicating the project's success.

An equally exciting moment occurred in April 2005. About two weeks after relocation, bear D21 moved from her den box and did not return. When researchers searched for her two cubs, they discovered that another of the relocated adult female bears (bear T5) had moved near D21's den box. They found that bear T5, who was relocated with only one cub, now had two cubs. How and why the adoption took place is open for speculation. D21 could have moved because T5 moved too close to her, or perhaps D21 abandoned her cubs and T5 heard their cries and went to their

Photo courtesy of LSU

LSU researcher Shauna Ginger lowers a drugged female from her winter den in Tensas River NWR to be moved with her cubs to east-central Louisiana.

the Black Bear Conservation Committee, visit *bbcc.org.*

rescue. While the causes are unknown, the cubs were definitely adopted. D21 crossed the Mississippi River and was last located in Wilkinson County, Miss., and T5 and her cubs remain in the Three Rivers Complex.

The team will continue to move bears into the Three Rivers Complex until a viable population has been established. New areas are also being considered for future repatriation projects. To find out more about the Louisiana black bear and how to help support their recovery, contact the BBCC at 225/763-5425 (*www.bbcc.org*) or the Louisiana Department of Wildlife and Fisheries at 225/765-2385 (*www.wlf.louisiana.gov*).

Originally from New Jersey, Dave Telesco has worked as a wildlife technician on management and research projects across the country. He has studied black bear habitat use and population ecology and is currently the private lands biologist for the Black Bear Conservation Committee.

Photo courtesy of USFWS

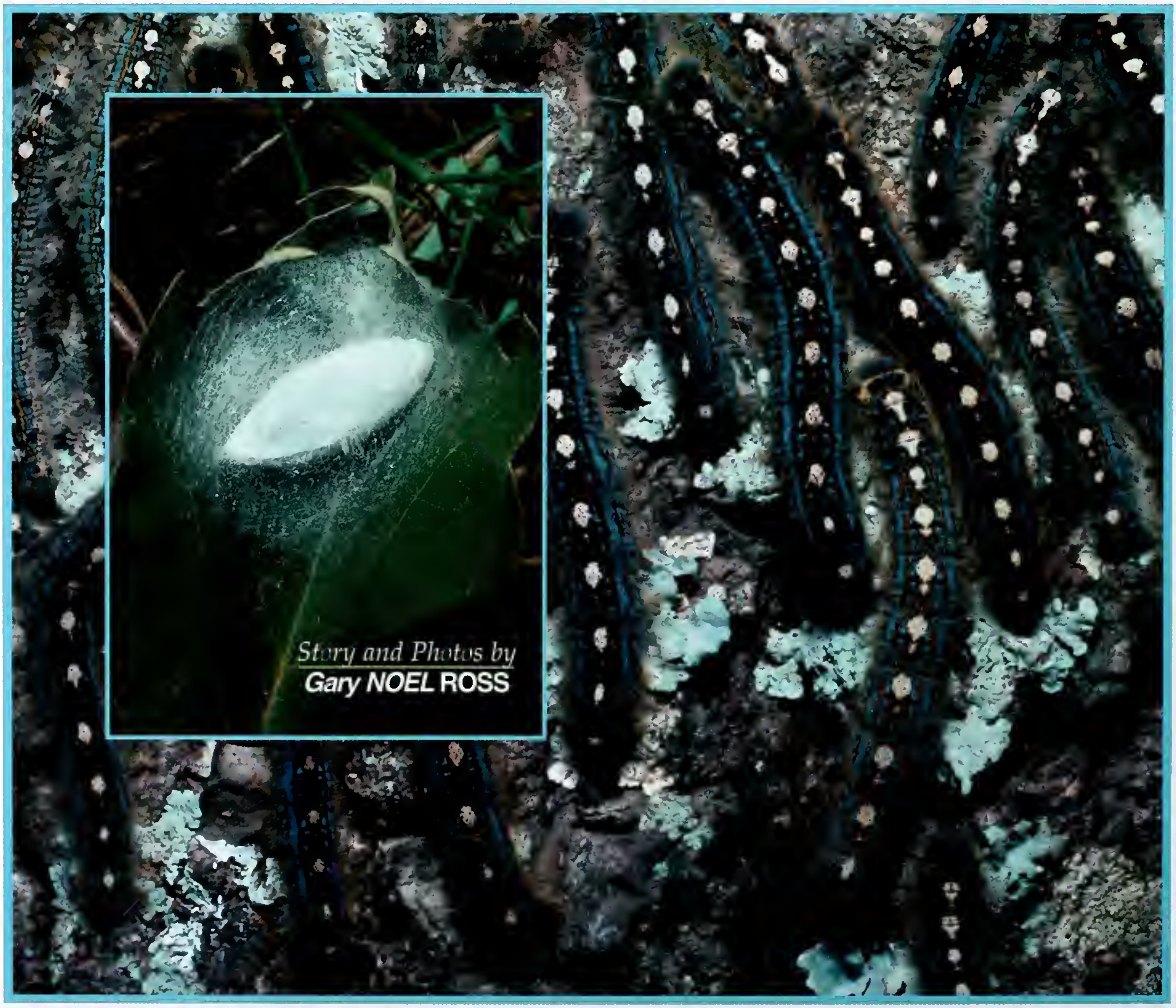
The female who had the first documented "natural" reproduction of the Louisiana repatriation project in her ground den where she had her record-breaking five-cub litter.

Photo courtesy of LSU

LDWF's Johnny Warren and Lowrey Moak help a female and her cubs move into their new den at Red River WMA.

RESTORE THE BEAR ★★ BLACK BEAR CONSERVATION COMMITTEE ★★

the tentless TENT Caterpillar



Story and Photos by
Gary NOEL ROSS

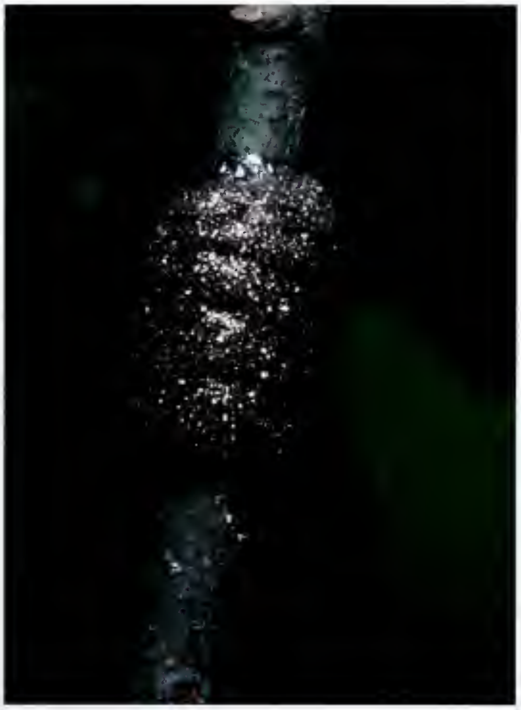
Opposite page: When not feeding, forest tent caterpillars rest in tightly packed masses on tree trunks and limbs. The caterpillars form crystalline cocoons in the leaves of their host trees.

During late April and early May of 2005, many residents in southern Louisiana noticed that common landscape trees—oaks, pecan, elms and sweet gum—were rapidly being defoliated. Many azaleas, crepe myrtles and even fruit trees exhibited leaf damage also. Inspections revealed an abundance of worm-like crawlers, about two inches long, blue-striped and bearing long, white hairs. When the villains weren't feeding, they rested in tightly packed masses on tree trunks and limbs. Not infrequently, however, caterpillars would fall from their perches, alarming any unsuspecting victim below. Luckily, the crawlers didn't sting. By mid-May, many trees were virtually leafless whereas others presented numerous leaves rolled into balls. When examined, each "ball" proved to be a leaf or leaves pulled together by silken threads creating a hideaway for a pale yellow, football-shaped, mummy-like cocoon. Small silken webs containing similar cocoons could often be found attached to shaded sides of houses and inside carports. Additionally, ransacked cocoons littered lawns beneath infested trees. After a week or so, no other "surprises" surfaced, and indeed, the damaged trees began to releaf.

The above scenario is the result of the forest tent caterpillar. Technically known as *Malacosoma disstria*, these caterpillars are in reality the larvae of a rather small, light brown moth—not to be confused with the large buck moth caterpillar, also known as the "stinging caterpillar" (see *Louisiana Conservationist*, May/June 2001). Forest tent caterpillars are unquestionably the most common leaf eaters in hardwood forests throughout the United States. Practically all hardwood species are targeted except red maple. Exceptionally large outbreaks of these caterpillars occur every 10 to 12 years, and always during early spring. (Gum tree forests in both Louisiana and Alabama usually manifest yearly infestations.) The marauding hordes with their non-stop munchies can strip thousands of acres of forest. While this defoliation does not kill trees, it does cut down on tree productivity by reducing the amount of time a tree engages in its food producing process called photosynthesis. Tent caterpillars, therefore, are of economic importance. For homeowners, though, the damage is purely a cosmetic issue. On a positive note, droppings from the caterpillars, termed "frass," are an excellent organic fertilizer for enriching soils.

In the southern U.S., the forest tent caterpillar is closely related to two other species of social, web-producing lepidopterans (moths and butterflies): the Eastern tent caterpillar and the fall webworm. The names reflect the insects' ability to weave conspicuous loose, silken structures—commonly called tents—that serve as daytime "houses" during rest periods and molts (times when caterpillars shed their skins in order to grow). The tents logically provide protection from drying air and daytime predators such as spiders, lizards, birds and other insects. (While caterpillars are most active at night, they sometimes feed during early morning and afternoon hours, and on cloudy days, too.) Surprisingly, of the three species of tent caterpillars recognized, only one, the forest tent caterpillar, does not build an actual tent. Instead, individuals of this species gather together en masse on tree bark where they lay down a large, communal silken mat for their periods of rest.

Forest tent caterpillars are nomadic foragers. A foray begins by one or more caterpillars moving to the edge of the bivouac. These "lead" individuals then begin to lay down silken threads as they crawl. The silk is secreted from special glands in the head. As each caterpillar crawls, it taps the silken strand with its anus to deposit a chemical, or pheromone. Both the silk and



Females deposit 100 to 350 small eggs around a small outer twig of a host tree. The egg mass is then covered with a frothy glue-like substance that hardens into a shiny, protective coating.

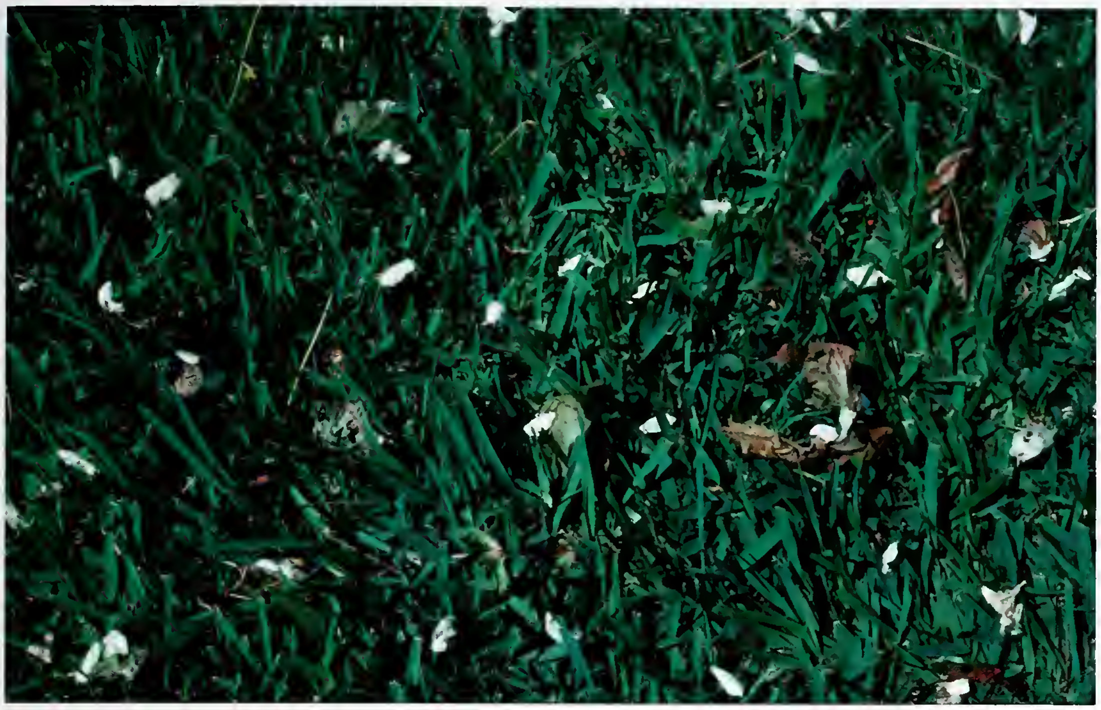
pheromone stimulate and guide additional caterpillars. Each in turn reinforces the path with silk and odor of its own. The routine continues until the entire mass disperses. Caterpillars on the move are highly reminiscent of a battalion of human soldiers on patrol, and so the caterpillars are commonly, but erroneously, called "army worms."

The cocoon of the forest tent caterpillar is equally unusual. When a mature caterpillar is ready to shed its skin for its next stage, the pupa, it lays down a framework of loose silken threads in some secure, shaded place. Once inside, the caterpillar weaves multiple layers of silk around itself to form a tight cocoon. During the weaving, the caterpillar releases from its anus copious amounts of tiny, light yellow crystals made up of almost pure oxalic acid. These are mixed with the silk for added strength. If a cocoon is torn apart, the crystals billow up as a fine powder. Since oxalic acid is a known irritant to many animals—including humans—researchers theorize that the powder deters potential predators.

The cocoons, however, are not totally immune from attack. For instance, in the Baton Rouge region during the 2005 season, the leafless nature of infested trees served as a calling card to mocking birds, common grackles, starlings, brown thrashers and several types of warblers. The birds actively tore open cocoons, extracted the pupae, and then discarded the cocoons, which fell to the ground. With such abundant food, no doubt these birds experienced a baby boom during 2005. Cocoons that escape predators release their metamorphosed adults after eight or nine days.

The emergence of the moths is synchronous, that is, all individuals emerge within a short period. For instance, last year in Baton Rouge, this occurred between May 23 and 26. Both the male and female are relatively small (wingspans are about one inch with males being a bit smaller than females); bodies are covered with long, thick hairlike scales. The moths are an

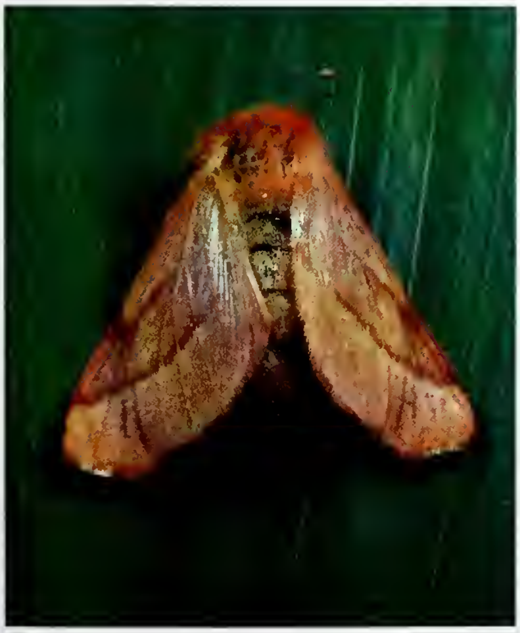
Forest tent caterpillars are actually the larvae of a small, light brown moth. They should not be confused with the large buck moth caterpillar, also known as the "stinging caterpillar."



Though cocoons offer the pupae protection, they can also be targets of predation by birds. Above, empty cocoons are scattered on the ground beneath the host tree.

attractive cinnamon color accented with two darker, oblique bars on their forewings. There are no mouthparts. Unable to feed, the moths have a flash-in-the-pan lifespan: three to five days. Since activity centers on mating and laying eggs, females emit a potent sex pheromone for attracting males. Mating occurs in early evening and by midnight, females usually have deposited their eggs.

Curiously, adults are attracted to bright lights following their nuptial flights. After circling a bit, individuals—often in huge concentrations—alight on nearby surfaces, and remain through the night. There they are convenient targets for predators such as geckos, lizards, ants and even aerial birds and bats. (Once again, this abundance becomes windfall food for other species.) But no need to worry, with eggs deposited, adults have completed their circle of life.



Upon emergence, both male (shown at left) and female moths live only three to five days with the sole purpose of mating and laying eggs.

Females deposit 100 to 350 small eggs in a single mass around a small outer twig of a host tree. When this act is completed, the new mother covers the circular egg mass with a frothy glue-like substance. This quickly hardens into a shiny, protective coating. Eggs persist through the next 10 to 11 months, and therefore represent the longest stage in the life cycle of the species. The following spring, viable eggs hatch into tiny, black, hairy crawlers. These pee-wees remain in close proximity to each other. With appetites operating in overdrive, the youngsters quickly exhaust nearby tender, nascent greenery. During the next four to five weeks they grow quickly and move farther and farther afield, quickly becoming the nuisance we associate with them. Fortunately, touch and go relationships with predators and diseases take their toll, causing populations to yo-yo through the years. Let's hope 2006 will be an off year for the annoying but amazing forest tent caterpillar.

Gary Noel Ross, Ph.D., is Director of Butterfly Festivals for the North American Butterfly Association and Research Associate for the McGuire Center for Lepidoptera and Biodiversity in Gainesville, Florida. He currently lives in Baton Rouge.

TOPSY Turkey

The *Wild* World of *Wild* Turkey Management

Story by
***Fred* KIMMEL**

LDWF File Photo

LDWF File Photo

LDWF File Photo

Photo by Jimmy Stafford

The restoration of wild turkeys is one of the most successful conservation stories of the modern era. Habitat deterioration and lack of effective hunting regulations brought Louisiana's wild turkeys to the brink of extinction by the late 1940s. During the 1940s and 1950s, efforts to restore wild turkey populations by releasing captive-reared wild turkeys were unsuccessful. It was not until the 1960s that real progress was made in restoring wild turkey populations.

In 1962, LDWF began its trap and release program. Wild turkeys were trapped from the few areas where they were abundant and released into areas of good habitat that did not contain wild turkeys. From 1962 to 2004, 3,814 wild turkeys were trapped and released in Louisiana. Today we have a wild turkey population of 60,000 to 80,000 birds. Turkey hunting is allowed in 47 parishes and hunters take about 11,000 wild turkeys each season.

Now that the trap and release program is winding down, the department's wild turkey program is focused on managing our wild turkey resources. Wild turkey habitat improvement work and development of hunting regulations are key components of the department's wild turkey management program. However, habitat improvement efforts are effective only if we have accurate information regarding wild turkey habitat requirements, preferences and responses to habitat management. Similarly, hunting regulations are effective only if we know how those regulations actually impact turkey populations.

It is the role of research to answer questions and provide the basic information needed to manage wild turkeys. To provide this information, the department is involved in several wild turkey research projects. These projects are often cooperative ventures that involve the department, private conservation organizations, other government agencies, corporations and individual conservationists.

Sherburne WMA Wild Turkey Hen Ecology Project

Sherburne Wildlife Management Area (WMA) has a thriving wild turkey population and since 2000, the turkey kill has averaged about 45 gobblers per year during the nine-day turkey season. Although extensive work has been done to investigate wild turkey ecology in pine/upland hardwood habitats, very little turkey research has been conducted in bottomland hardwood ecosystems like Sherburne WMA. To better understand the dynamics of wild turkey ecology on Sherburne WMA, a research project was developed to investigate hen ecology and productivity. The Louisiana Department of Wildlife and Fisheries (LDWF), Louisiana State University (LSU) School of Renewable Natural Resources, and the Louisiana Chapter of the National Wild Turkey Federation (NWTF) funded the project. LSU graduate student Walker Wilson, working under the direction of Dr. Michael Chamberlain, conducted the research. For the research project, which was completed in 2005, 39 hens were fitted with radio transmitters and monitored.

Several interesting aspects of wild turkey ecology on Sherburne have come to light as a result of this work: 1) Hen survival throughout the year was higher than that observed from other studies. 2) Unlike some other studies, poaching was not a significant hen mortality factor on Sherburne. In fact, none of the radio-marked hens were taken illegally. 3) Nest initiation/success was very low. 4) Brood survival appears to have been high.

One reason for the observed high hen survival may have been the low nest initiation/success rate. Hens are most vulnerable to predation when they are incubating nests. However, since nest success/initiation rates on Sherburne were very low, hens spent very little time incubating nests. The reasons for low nest incubation/success rates are probably related to the lack of good nesting habitat. Flooding and past timber management practices have resulted in a forest with sparse understory vegetation in many areas. This lack of cover makes nests very vulnerable to predation. During the early spring, much of the forest ground cover is composed of bedstraw and wild carrot. These plants create an illusion of abundant cover but fade out as spring progresses. Hens that nested in this vegetation had good cover initially, but found their nests exposed as the vegetation disappeared. Despite the poor nest success rates, Sherburne WMA continues to have a healthy turkey population. One explanation is related to the observation that brood survival appears to be high.

This research has reinforced the need for active forest management. Good nesting habitat appears to be in short supply on Sherburne. Forest management that enhances the diversity and density of understory vegetation can improve nesting habitat for wild turkeys. While turkeys avoid overly dense vegetation, they do benefit from forest management that results in a diversity of species and structure.

Sherburne WMA Wild Turkey Gobbler Survival and Dispersal Project

This project began in 2005, and focuses on wild turkey gobbler ecology. Specifically, gobbler survival and hunting mortality, movement during hunting season, and dispersal throughout the year are being investigated. The LSU School of Renewable Natural Resources, LDWF, Louisiana Chapter of the NWTF, and Anadarka Petroleum Corporation are providing support and funding for this project. LSU graduate student Blake Grisham, working under the direction of Dr. Michael Chamberlain, is conducting the research.

Gobblers are being banded and fitted with radio transmitters. Gobbler hunting mortality will be estimated from band return data. Radio-marked gobblers will provide additional hunting mortality information and can be used to validate harvest estimates derived by banding. The radio-marked gobblers will also provide information about gobbler movement and dispersal. Of particular interest, is how gobblers respond to hunting pressure and to what degree gobblers are moving between the WMA and adjacent private land. This project will be completed in 2007.

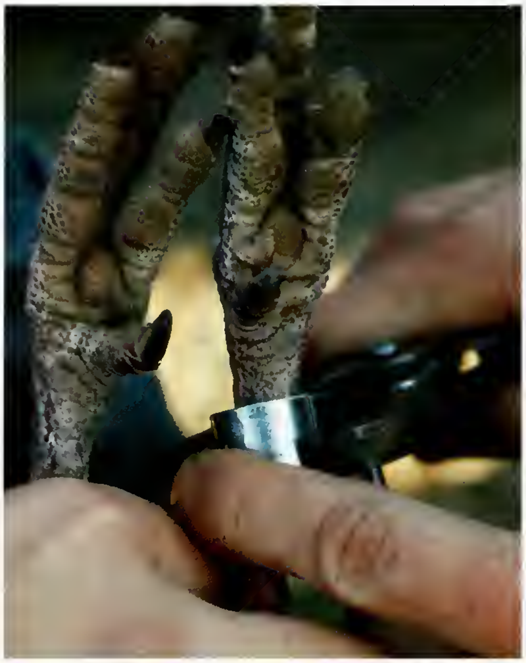
LDWF File Photo

Biologists attach a radio transmitter to a wild turkey hen. Transmitters are worn like a backpack and can transmit for one year or more.

Gobbler Banding Projects

Most hunters are familiar with duck banding but may not know that banding is an important tool for managing other birds like wild turkeys. Banding can provide a variety of insights, but the most important tool derived from banding is an estimate of hunting mortality. Each band is imprinted with a unique number and a phone number for reporting the band. The percentage of banded birds taken by hunters in the same year they were banded provides an estimate of the harvest rate.

Opposite page, bottom: Poult survival is influenced by rainfall and can vary considerably from year to year. Wild turkey production is usually highest when dry conditions prevail during April and May, but adequate rainfall occurs during summer months.



Banding is a useful tool for managing many birds, including wild turkeys. Information derived from banding yields a variety of insights, but the most important is hunting mortality.

LDWF File Photo

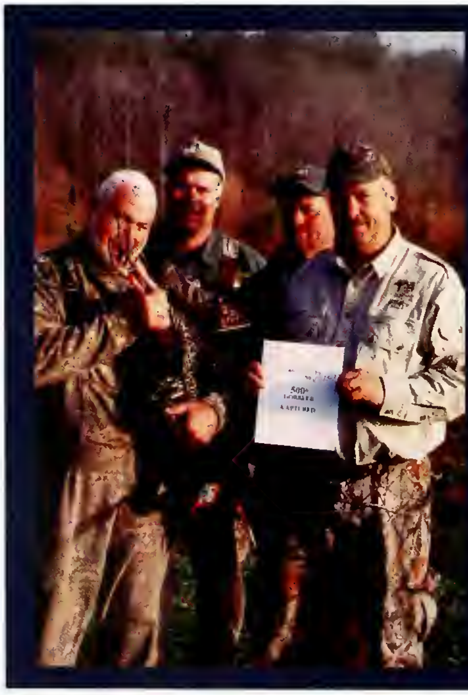
An important banding project was conducted in Washington Parish from 1989 to 1997. Over 200 gobblers were banded on public and private land during the course of this project. Adult gobbler harvest rate was estimated at 70 percent and the juvenile gobbler (jakes) harvest rate was estimated at 23 percent. The adult harvest rate was one of the highest ever recorded for wild turkeys. This information has been used to refine the state's wild turkey hunting regulations.

In order to monitor changes in turkey harvest rates, the Washington Parish banding project was repeated during 2000 through 2006. Nearly 300 gobblers have been banded during the most recent phase of the project. In addition to the standard bands, some turkeys were fitted with $100 reward bands. Reward bands are used to validate the results of standard banding. Thus far, it appears that the harvest rate has dropped to a more acceptable level with slightly more than 40 percent of the adult gobblers being taken by hunters.

Since turkey harvest can vary from area to area, it is important to have regional data by which to base management decisions. In order to estimate harvest rates in north-central Louisiana, a band project was begun on public and private land in Lincoln and Bienville parishes. This project was a cooperative effort involving Dr. James Dickson at Louisiana Tech University, LDWF, and International Paper Co., Weyerhaeuser Corp. The Louisiana Chapter of the NWTF provided substantial funding for the project. During 2001 through 2003, 191 gobblers were banded. During the course of this project, hunters took about 15 percent of the adult gobblers and 10 percent of the jakes. An additional project in Union Parish was begun in 2006 and will provide additional information specific to this part of the state.

Some public hunting areas receive considerable turkey hunting pressure, and it is important that LDWF have sound, scientifically based information by which to make management decisions. In 2006, a banding project was begun on Red River, Three-

Below, left to right: Bruce Knight, Tommy Bruhl, Calvin Waskom, and Jimmy Stafford display the 500th gobbler.



500th Gobbler Trapped

Since 1989, LDWF Wildlife Division biologists and WMA personnel in Region 7 have been trapping wild turkey gobblers (males) as part of a study to examine harvest mortality rates, growth rates and other related information. This southeast Louisiana study focused on gobblers at Bens Creek WMA and neighboring hunting clubs. These lands are similar pine habitat owned and intensively managed by Weyerhauster Company. Recently the LDWF capture crew surpassed a milestone by capturing their 500th gobbler. Since its inception, the study has provided a wealth of information about gobblers and the influence of hunting on them. This information has allowed turkey managers to be proactive in adjusting turkey regulations that best ensure the long-term proliferation of the species.

Study biologist N.J. "Jimmy" Stafford credits the WMA staff, including Tommy Bruhl, Bruce Knight and Calvin Waskom, as well as numerous other Region 7 biologists and technicians that assisted with trapping over the years. These dedicated people worked countless days from before dawn till after dusk to accomplish trapping quotas. This effort is the largest number of gobblers studied over the longest period ever conducted within Louisiana. The studies have already begun to yield valuble information. Upon completion, the results of these studies will provide both turkey managers and enthusiasts with practical insight regarding the management of this important species.

Rivers and Big Lake WMAs. Banding was also conducted on Tensas River National Wildlife Refuge. Harvest rate estimates from these areas will be used to evaluate the impacts of WMA hunting regulations.

Wild Turkey Production Survey

Wild turkey populations are difficult to estimate, so biologists use a variety of indicators that can be used to track population trends. One of these indicators is the wild turkey production survey. Data from this survey are used to monitor annual wild turkey productivity.

Biologists, enforcement agents and volunteer observers record information about every wild turkey they see during July and August. The information is used to develop a production index, that is, the ratio of poults (young turkeys) to adult hens. For example, a ratio of four poults per hen is considered to be indicative of excellent production, while a ratio of one poult per hen indicates poor production. The state is divided into regions based on historical habitat types, and a production index is developed for each region. Information from this survey is used to monitor productivity and predict population trends.

Gobbling Activity Survey

Gobbling activity is a key element in determining hunter success and satisfaction. Although turkeys may gobble throughout the year, intense gobbling often begins in February and continues through June. Gobbling activity is stimulated by the effect of increasing day length (photoperiod) on the pituitary gland. The pituitary gland controls the hormones that regulate breeding activity. Although photoperiod is the primary factor governing gobbling activity, environmental factors such as weather and availability of hens cause daily and weekly variations in gobbling activity.

The timing of turkey hunting season is often a controversial subject. Hunters prefer that the turkey season open when turkeys are actively gobbling. However, year to year variations in gobbling activity occur, and hunters have differing opinions of when gobbling activity peaks. Prior to 1996, there was little scientific information about the timing of gobbling in Louisiana. Information that existed was anecdotal and was insufficient to address hunter concerns about the timing of turkey season.

Photo by David Moreland

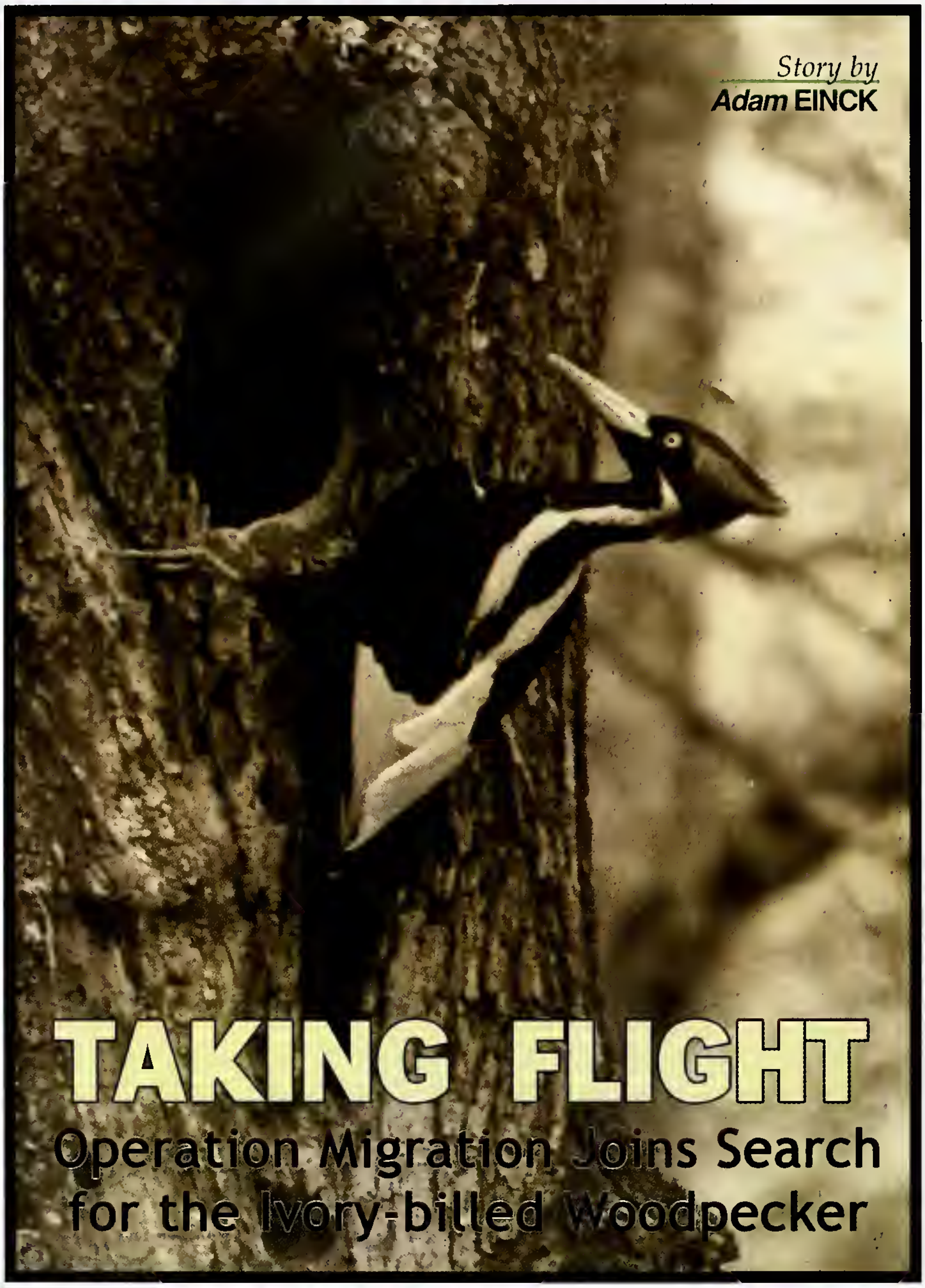
Wild turkeys were nearly extirpated from Louisiana by 1950. Thanks to smart management practices, they are now common in much of the state.

In order to gather information about gobbling activity in a scientific manner, a gobbling activity survey was begun in 1996. This survey is conducted by LDWF biologists and technicians who follow an established protocol to monitor gobbling activity during the three weeks prior to the opening of the turkey season. Results of this survey indicate that in most years, gobbling activity peaks while the turkey season is open. The data does not support the often-heard claim that gobbling activity peaks before turkey season opens. This survey is also useful in evaluating hunting season results and can be a predictor of hunter satisfaction.

The Future

Right now the future for wild turkeys is brighter than at any time in memory. During the last 60 years, Louisiana's wild turkey population has increased from less than 2,000 birds to nearly 80,000 birds. While the work of restoring the population is largely accomplished, the equally difficult job of managing habitat and regulating the harvest to sustain this resource continues. As the demand for turkey hunting increases and habitat conditions change, the need for science-based management grows. Research will play a key role in providing the information needed to effectively manage Louisiana's wild turkeys in the coming decades.

Fred Kimmel is the Upland Game Program Leader for LDWF. He has been with the department for 19 years.



TAKING FLIGHT

Operation Migration Joins Search for the Ivory-billed Woodpecker

Story by
Adam EINCK

Photo by Arthur A. Allen/Copyright Cornell Lab of Ornithology

The ivory-billed woodpecker sighting in February 2004 in the Big Woods area of Arkansas has rekindled a 60-year-old debate between believers and skeptics: IS THE BIRD REALLY EXTINCT? *The search for further proof that the ivory-billed woodpecker still exists is an ongoing mission to help end this disagreement.*

The Arkansas sighting also provided new motivation for additional searches in Louisiana and Mississippi, which have favorable habitat for the ivory-billed woodpecker (IBW). One such search for the mysterious bird took place at Louisiana's Pearl River Wildlife Management Area (WMA) from Feb. 20-24, 2006. But this wasn't an ordinary search where biologists either walk on foot through the dense woods or travel by boat on the WMA's waterways. This search was coordinated by the Louisiana Department of Wildlife and Fisheries (LDWF) and it involved the non-profit group Operation Migration, (OM) which usually guides migrating birds south for the winter.

Before it was spotted in Arkansas, the IBW was last seen in 1943 on the Singer Tract, now Tensas National Wildlife Refuge, in Louisiana. The IBW is the largest recorded woodpecker in the U.S. and has earned the nickname of "Lord God Bird" after the expression most people made when they saw one. The bird's size and nickname have added to the lore and public fascination associated with the ivory bill and continue to inspire new searches.

"This bird carries a myth and legend," said Joe Duff, co-founder and CEO of Operation Migration. "I think everybody is enthusiastic about the opportunity to try and save a species like the ivory-bill that we thought was lost forever."

The last search for the IBW in Louisiana also occurred at Pearl River WMA in the winter of 2001 after a Louisiana State University (LSU) student reported a sighting in April of 1999. That search was called the "Zeiss Search" because it was funded by Zeiss Sports Optics and included LDWF, LSU, Cornell University, The

Nature Conservancy and the U.S. Fish and Wildlife Service (USFWS). Although a series of raps that sounded like IBW signals were heard, the search ended after 30 days without an official observation.

After the Arkansas sighting, the USFWS formed an Ivory-billed Woodpecker Recovery Team that will prepare a comprehensive recovery plan for the bird. USFWS also allocated money for new searches outside of Arkansas. To fund this new Pearl River WMA search, LDWF submitted a grant proposal to the recovery team to purchase video equipment and contract OM for aerial surveys. USFWS then contracted directly with OM for aerial surveys in Louisiana, Mississippi and Arkansas and awarded LDWF with a $20,000 grant for the video equipment and personnel time.

"LDWF chose Pearl River WMA because we have had some reported sightings in the past from this area and it has suitable habitat," said Eric Baka, coordinator of the search and a LDWF non-game biologist with the Fur and Refuge Division. "Hurricane Katrina also supplied Pearl River with a lot of dead wood, which the bird favors."

Because of the extensive damage brought by Hurricane Katrina, LDWF wanted OM's flight capabilities, particularly their ability to fly low and slow with ultralight aircraft, which are basically hang gliders with a motor. "There are a lot of knocked down trees and traversing the area on the ground would be next to impossible," Duff said. "We can fly our aircraft in a V formation about 30 feet above the tree canopy at 35 mph."

With the money from USFWS, LDWF was able to purchase four digital 20-gigabyte hard drive, helmet-mounted cameras, a high definition (HD) camera and an 80-gigabyte hard drive for storage of the videos. The plan to capture the bird with this video equipment was to mount the HD camera on the lead aircraft and have it flush out any birds so the following aircraft could video tape the bird with their helmet-mounted cameras.

"These cameras allow us to have continuous recording. So if a pilot saw the bird, you wouldn't have any miscues like forgetting to turn the camera on or trying to take it out of a bag," Baka said. "The helmet-mounted cameras will also be pointed where the pilot is looking and should provide us our best chance to get solid recorded evidence that this bird does exist in Louisiana."

On the weekend of Feb. 18-19, the OM crew of four pilots with four ultralights met up with Baka and Wayne Higginbotham, a forester with LDWF Forestry Section, at the Picayune Memorial Airport in Mississippi. Here they discussed the strategy, timeframe and logistics of the search.

"Basically we just flew back and forth in formation above the habitat and started at the bottom of Pearl River WMA and worked our way north," Duff said.

On Feb. 20, the OM team took flight in search of the elusive ivory-bill. The goal was to spot the IBW and radio back to Baka and Higginbotham on the ground the exact coordinates. OM would then try to follow

Photo by Adam Einck

Downed trees throughout Pearl River WMA prevented ground searches, but OM's ultralight flyers offer the capability to search from the skies.

Photo by Adam Einck

Because of bad weather during the February search period, Operation Migration's four ultralights were not able to search as intensely as they had initially planned.

Photo by Joel Courtney

Operation Migration got its wings in 1988 when Bill Lishman became the first human to fly with birds in an ultralight aircraft. Lishman and fellow co-founder Joe Duff led 18 Canadian geese from Ontario to Virginia in 1993. In the spring of 1994, 13 of those geese returned to Ontario and proved that birds that are facing extinction could be pen raised and taught to navigate south for the winter and return on their own. Operation Migration (OM) became a formal Canadian-based non-profit charitable organization in 1994 and was the inspiration for the movie "Fly Away Home" in 1996 starring Jeff Daniels.

Since the movie, OM and the Canada/U.S. Whooping Crane Recovery Team have worked together to help lead this endangered bird south. Since the U.S. Fish and Wildlife Service (USFWS) had no way of teaching pen raised whooping cranes to fly south for the winter, OM helped them develop a technique to teach the birds to migrate south.

Before this effort, pen-raised whooping cranes stayed in the North for the winter, which has drastically reduced their survivability and has led the species to near extinction. Like other migratory birds, whooping cranes learn to fly south from their parents and only have to be taught the route once.

Since 2001, OM has used ultralight aircraft to lead whooping cranes from Wisconsin to Florida. These whooping cranes are captive birds that are pen raised at the U.S. Geological Survey Duck and Wildlife Research Center in Maryland.

At the research center the birds begin their imprinting process. Whooping cranes will imprint on the first thing that nurtures them and will look at that thing as a parental figure. Thus it is very important that all human contact with the whooping cranes during the imprinting process or migrating flight be done while wearing a costume to disguise one's human form. The costume is a large bag that extends from head to toe. It also has a reflector that covers the eyes, a screen to breathe through and black rubber boots. Talking and taking pictures are also not allowed near the bird.

"You want that bird to be wild," CEO and Co-founder of Operation Migration Joe Duff said. "We remove all human paraphernalia and give them as wild an experience as possible. If you were to approach one of these birds, it would fly away and that is what we are trying to accomplish. Consequently, we have 60 birds migrating every year and not one of them has been seen in a Wal-Mart parking lot or school yard."

Conditioning the bird to fly with the aircraft is the next step. The birds get used to the ultralight's sound and shape on the ground. When the cranes are ready to fly, usually after 45 days, they are airlifted to Necedah National Wildlife Refuge in Wisconsin for training during the summer with the ultralights.

The ultralights cost about $26,000 each and are basically hang gliders with 50 horsepower motors on the back. They can reach a maximum speed of 45 mph. The pilot sits in the outdoor elements and in front of the motor. In front of the seat is a bar to control the ultralight's direction in the air: pushing the bar out tilts the wing up to go up and bringing the bar in tilts the wing down to go down. The bar can also be swung left and right to move the ultralight in these directions.

"These ultralights have been modified to fly with birds," Duff said. "We put a bird guard fencing around the three bladed propeller to avoid any chances of having a bird get caught in the propeller. We also have a speaker that broadcasts calls of whooping cranes in case a couple get too far off of the path."

After the whooping cranes are trained to fly with the ultralights, they are ready for their migration south beginning in early October. Last year's migration took the OM crew and the whooping cranes until mid-December to fly 1,200 miles. Of those 64 days, OM and the cranes flew on 23 days because of the weather.

There are now 60 whooping cranes using the flyway between Wisconsin and Florida each year, which is four times more than in the 1940s. OM and the recovery team's goal is to have 125 whooping cranes using this flyway by 2011.

"We have an 80 percent survival rate with our current birds," Duff said. "By the time we are finished with this recovery mission, we should have a wild migratory population and then the bird could be considered for removal from the endangered species list."

Some information for this story was excerpted from the Operation Migration Web site. For more information on Operation Migration's efforts, please visit their Web site at *www.operationmigration.org.*

the bird as far as they could, while Baka and Higginbotham visited the sighting on the ground for further confirmation.

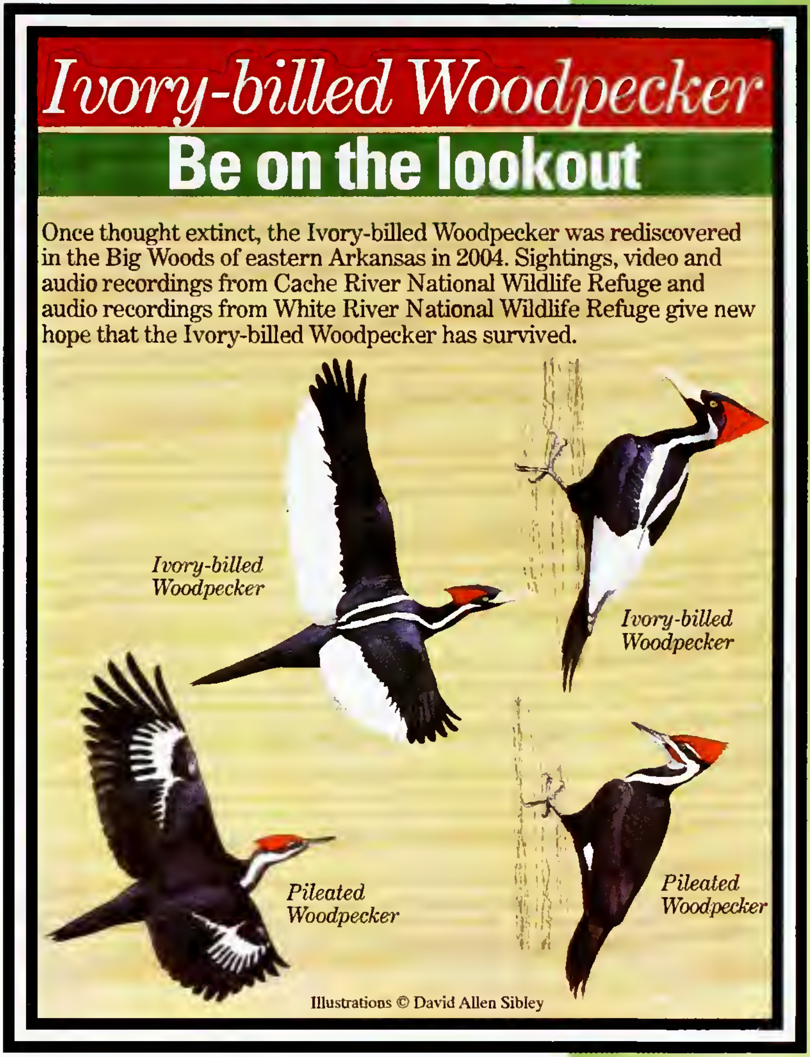
After the first day of flights, the Canadian based OM experienced firsthand Louisiana's unpredictable winter weather patterns. The bad weather greatly diminished search time in the air for the week.

"Weather is always an issue with an ultralight aircraft," Duff said. "I always say the ultralight aircraft is like a canoe. It's beautifully designed and efficient, but it's not made for the high seas. You take it out when the water is calm and with the ultralight you take it out when the wind is calm."

When the ultralights were able to fly, they provided clear video images of the area. After each day's flights, the videos were downloaded onto a hard drive so that the cameras could be used again the next day. The LDWF crew then searched the videos for any resemblance of an ivory-bill each night before going to sleep. Even though the IBW was not reported by the pilots or seen on the initial viewing of the footage during the week, the videos were saved for a more thorough examination later. The videos will also be archived for future uses such as habitat damage assessment to Pearl River WMA following Hurricane Katrina and other wildlife survey estimations found on the videos.

"I'm sure our Forestry Section would be very interested in our tapes. Since the area is so difficult to access on the ground, we can take segments of the tape and maybe get a more accurate damage assessment of the area. Even if we don't find the bird, these tapes will still pay dividends in the future," Baka said. "We also have them recording every woodpecker species that they see. Were hoping to see some redhead and red-bellied woodpeckers and downy or hairy woodpeckers."

After the OM crew was finished surveying Pearl River WMA and parts of Mississippi on Feb. 24, they loaded the ultralights into a trailer and headed north for two weeks of searching for the ivory-bill in Arkansas.



Ivory-billed Woodpecker

Be on the lookout

Once thought extinct, the Ivory-billed Woodpecker was rediscovered in the Big Woods of eastern Arkansas in 2004. Sightings, video and audio recordings from Cache River National Wildlife Refuge and audio recordings from White River National Wildlife Refuge give new hope that the Ivory-billed Woodpecker has survived.

Illustrations © David Allen Sibley

The ivory-bill resembles the pileated woodpecker. The identification guide above from the U.S. Fish and Wildlife Service offers tips on distinguishing the two birds.

Since this was the first time OM has been used for searching and surveying, LDWF will be responsible for evaluating this methodology for efficiency and effectiveness. LDWF is confident this method could work in the future because OM chased and videotaped many pileated woodpeckers, which are sometimes confused with the ivory-bills.

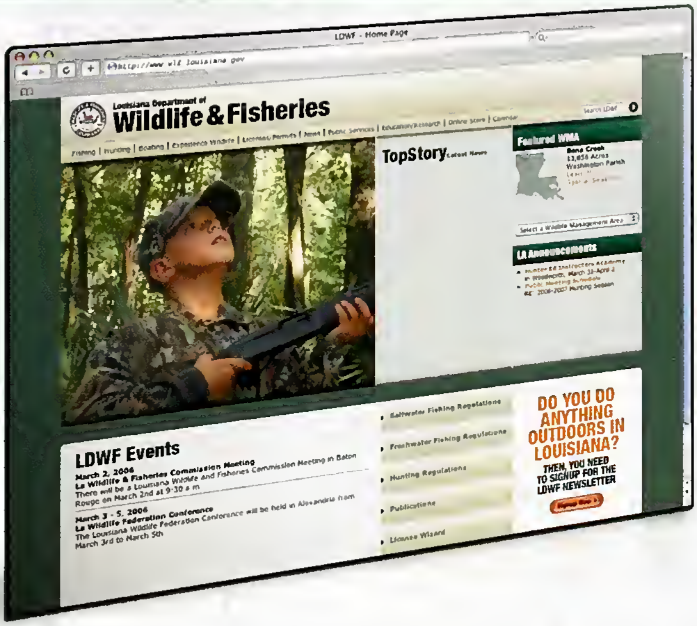
"The video is very stable and clear, considering the cameras were mounted onto the pilots' helmets," Baka explained. "You can see treetops and see the pilot scanning back and forth. We're confident that if the IBW flushed, the pilot would get conclusive evidence."

OM is also hopeful this methodology is used in the future and wants to play a role in rediscovering the IBW in Louisiana. "It's beyond my wildest dreams if we did find this bird, but we would love to make that contribution to all of the dedicated people who have done a lot of leg work looking for this bird," Duff said. "We have a better opportunity than most because of the aircraft and the distance we can cover in a short amount of time. We would like to look longer and maybe do this again next year."

Adam Einck is the News and Media Relations Officer for LDWF.

Simpler

www.wlf.louisiana.gov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Signup Now

Bens Creek
13,656 Acres
Washington Parish

- Hunter Ed Instructors Academy in Woodworth, March 31-April 2
- Public Meeting Schedule RE: 2006-2007 Hunting Season

LDWF Events

March 2, 2006
La Wildlife & Fisheries Commission Meeting
There will be a Louisiana Wildlife and Fisheries Commission Meeting in Baton Rouge on March 2nd at 9:30 a.m.

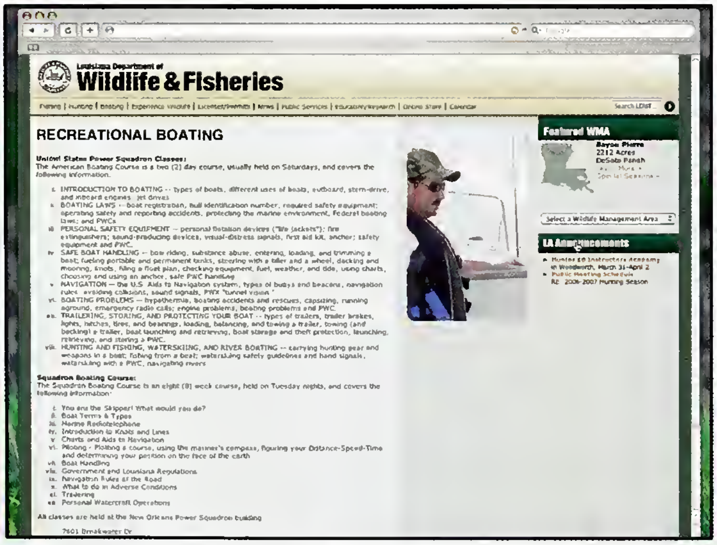
March 3 - 5, 2006
La Wildlife Federation Conference
The Louisiana Wildlife Federation Conference will be held in Alexandria from March 3rd to March 5th

The Louisiana Department of Wildlife and Fisheries is always striving to make your experience with us a more pleasant one. We now have a new department Web site with up-to-date technology that will allow you to more easily take advantage of all of the great recreational and commercial fish and wildlife activities our state has to offer.

The user interface is now more intuitive. Links to the topics you want are at the top of the page.

Follow the links from the general to the more specific. Like topics are grouped together in windows.

Easier to Navigate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LA Announcements

RECREATIONAL BOATING

United States Power Squadron Classes:
The American Boating Course is a two (2) day course, usually held on Saturdays, and covers the following information.

- i. INTRODUCTION TO BOATING -- types of boats, different uses of boats, outboard, stern-drive, and inboard engines, jet drives
- ii. BOATING LAWS -- boat registration, hull identification number, required safety equipment; operating safely and reporting accidents, protecting the marine environment, Federal boating laws; and PWCs
- iii. PERSONAL SAFETY EQUIPMENT -- personal flotation devices ("life jackets"); fire extinguishers; sound-producing devices, visual-distress signals, first aid kit, anchor; safety equipment and PWC.
- iv. SAFE BOAT HANDLING -- bow riding, substance abuse, entering, loading, and trimming a boat; fueling portable and permanent tanks, steering with a tiller and a wheel, docking and mooring, knots, filing a float plan, checking equipment, fuel, weather, and tide, using charts, choosing and using an anchor, safe PWC handling
- v. NAVIGATION -- the U.S. Aids to Navigation system, types of buoys and beacons, navigation rules, avoiding collisions, sound signals, PWX "tunnel vision."
- vi. BOATING PROBLEMS -- hypothermia, boating accidents and rescues, capsizing, running aground, emergency radio calls; engine problems, boating problems and PWC.
- vii. TRAILERING, STORING, AND PROTECTING YOUR BOAT -- types of trailers, trailer brakes, lights, hitches, tires, and bearings, loading, balancing, and towing a trailer, towing (and backing) a trailer, boat launching and retrieving, boat storage and theft protection, launching, retrieving, and storing a PWC.
- viii. HUNTING AND FISHING, WATERSKIING, AND RIVER BOATING -- carrying hunting gear and weapons in a boat; fishing from a boat; waterskiing safety guidelines and hand signals, waterskiing with a PWC, navigating rivers

Squadron Boating Course:
The Squadron Boating Course is an eight (8) week course, held on Tuesday nights, and covers the following information:

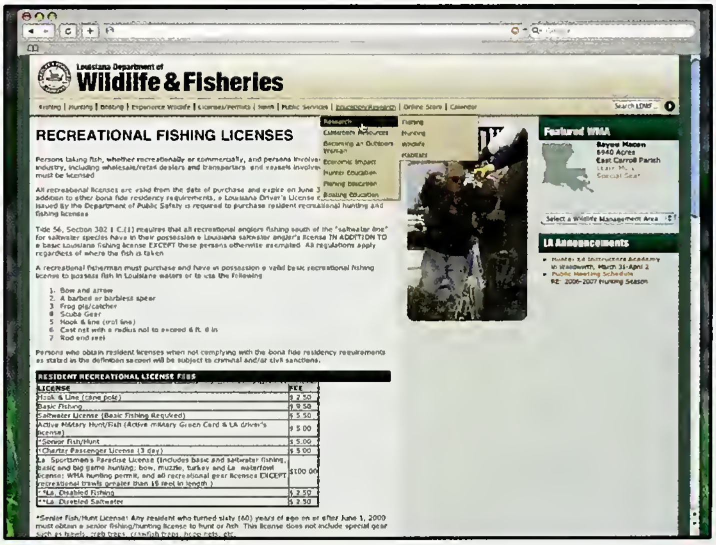
- i. You are the Skipper! What would you do?
- ii. Boat Terms & Types
- iii. Marine Radiotelephone
- iv. Introduction to Knots and Lines
- v. Charts and Aids to Navigation
- vi. Piloting - Plotting a course, using the mariner's compass, figuring your Distance-Speed-Time and determining your position on the face of the earth
- vii. Boat Handling
- viii. Government and Louisiana Regulations
- ix. Navigation Rules of the Road
- x. What to do in Adverse Conditions
- xi. Trailering
- xii. Personal Watercraft Operations

All classes are held at the New Orleans Power Squadron building

7601 Breakwater Dr

Bayou Pierre
2212 Acres
DeSoto Parish

- Hunter Ed Instructors Academy in Woodworth, March 31-April 2
- Public Meeting Schedule RE: 2006-2007 Hunting Season



RECREATIONAL FISHING LICENSES

Persons taking fish, whether recreationally or commercially, and persons involve industry, including wholesale/retail dealers and transporters and vessels involve must be licensed

All recreational licenses are valid from the date of purchase and expire on June 3 addition to other bona fide residency requirements, a Louisiana Driver's License issued by the Department of Public Safety is required to purchase resident recreational hunting and fishing licenses

Title 56, Section 302.1 C.(1) requires that all recreational anglers fishing south of the "saltwater line" for saltwater species have in their possession a Louisiana saltwater angler's license IN ADDITION TO a basic Louisiana fishing license EXCEPT those persons otherwise exempted. All regulations apply regardless of where the fish is taken

A recreational fisherman must purchase and have in possession a valid basic recreational fishing license to possess fish in Louisiana waters or to use the following

1. Bow and arrow
2. A barbed or barbless spear
3. Frog gig/catcher
4. Scuba Gear
5. Hook & line (trot line)
6. Cast net with a radius not to exceed 6 ft. 6 in
7. Rod and reel

Persons who obtain resident licenses when not complying with the bona fide residency requirements as stated in the definition section will be subject to criminal and/or civil sanctions.

RESIDENT RECREATIONAL LICENSE FEES

LICENSE	FEE
Hook & Line (cane pole)	$ 2.50
Basic Fishing	$ 9.50
Saltwater License (Basic Fishing Required)	$ 5.50
Active Military Hunt/Fish (Active military Green Card & LA driver's license)	$ 5.00
*Senior Fish/Hunt	$ 5.00
†Charter Passenger License (3 day)	$ 5.00
La. Sportsman's Paradise License (Includes basic and saltwater fishing, basic and big game hunting; bow, muzzle, turkey and La. waterfowl license; WMA hunting permit, and all recreational gear licenses EXCEPT recreational trawls greater than 16 feet in length.)	$100.00
**La. Disabled Fishing	$ 2.50
**La. Disabled Saltwater	$ 2.50

*Senior Fish/Hunt License: Any resident who turned sixty (60) years of age on or after June 1, 2000 must obtain a senior fishing/hunting license to hunt or fish. This license does not include special gear such as hoops, crab traps, crawfish traps, hoop nets, etc.

Bayou Macon
6940 Acres
East Carroll Parish

- Hunter Ed Instructors Academy in Woodworth, March 31-April 2
- Public Meeting Schedule RE: 2006-2007 Hunting Season

More Complete

Find everything you need. Visit our Web site at http://www.wlf.louisiana.gov

Goo-Goo for Goggle-eyes

Story by
Pete COOPER Jr.

Illustrations by
Thomas GRESHAM

Warmouths, or "goggle-eyes," are found statewide and provide a fine warm-month opportunity.

The time for some fairly slim pickings for many anglers across the Sportsman's Paradise is rapidly approaching. The sac-a-lait (crappie) have long since finished their annual spawn in the shallows and moved back into much deeper water where they can be difficult to locate. Likewise, the chinquapins (redear sunfish) have disappeared back into wherever it is that they hide for 11 months every year. Assuredly, bluegills will provide at least some action for a while longer, but in many cases, the best of it will wind down shortly.

Bass, catfish and a few other species offer some pleasures now, though to me they lack a bit in culinary appeal compared to the others—the larger ones, anyway. There's always the option of making a speck-run to the coast; I've heard rumors that Grand Isle and Cocodrie, at least, still exist. But there is another opportunity available to folks statewide, and it offers both plenty of fun and some tasty skillet material: warmouths, more commonly known as "goggle-eyes."

Warmouths (*Lepomis gulosus*) are quite attractive fish, with coloration resembling redear sunfish but with much larger mouths and thicker backs, the latter characteristic making them easy to fillet. They tend to average a size that facilitates that practice, too. On that note, I must avow that, at least to my palate, any strong or "muddy" taste that has been occasionally attributed to these fish can be eliminated by filleting them, skinning the fillets, and then soaking them in milk for an hour or so before fast-frying them in a beer batter.

My tummy and I have been well entertained by these fish since I was a child. The first came from an artesian spring-fed creek that ran through my maternal grandparents' ranch in the Texas Hill Country. More came from Caddo, Bistineau and Wallace lakes near my old home in Shreveport as well as the "flats" of Upper Grand River, False River and the pits adjacent to Halfmoon and Two O'Clock bayous during college. Some readers might be blown away by the fact that a very large percentage of my total tally came from a pair of canals near Tidewater! Goggle-eyes may not be everywhere, but they're close!

Generally, goggle-eyes provide a warm-month opportunity, and my experiences with them have occurred from roughly mid-May into October. They are aggressive, often to the point to total disregard of nature's inherent survival instincts. They will unabashedly strike bass-directed lures that are almost as large as they are—perch-colored Devil's Horses and 6-inch purple plastic worms having accounted for many of them.

Still, "gogs" are more commonly found in catches of bluegills, having been enticed by earthworms, crickets, grasshoppers and various wasp larvae, among others. In my younger days I even caught them on well-chewed bubble gum fashioned into small worm-like shapes. Simply put, their diets are not discriminatory. That, combined with their aggressiveness, makes them an excellent fly-fishing target, especially with poppers.

Never pass up a ring of cypress knees.

Low light and woody structure are two key factors for success with warmouths.

However, no matter what your lure or bait of choice might be, there are some hard and fast rules for enjoying these fish to their maximum potential in the fun department. First of all, warmouths are partial to two forms of structure: wood and grass.

Wood comes in numerous forms on any given lake or bayou. Pier pilings and standing green timber are two, but they are possibly the least productive of all, except in the following case: a ring of knees around a big cypress tree. Warmouths will hold close to the inside of the ring, apparently waiting either for some insect to fall from the tree or for some form of aquatic prey to enter the ring in search of food or haven. Never pass up such a spot, especially if it is in less than three feet of water.

Dead timber is typically the best form of structure. Well-aged stumps (the bigger the better) in such depths are almost guaranteed to produce at least one fish, possibly more. Jumbles of logs on bottom are also good bets. There are two factors that greatly enhance the potential of both. The first is the presence of submergent vegetation, especially coontail and peppergrass. Indeed, these fish can also hold near an open pocket within or along the edges of thick, shallow-water accumulations of these grasses where wood is not present. The second factor to look for is shade. Ever since day one on that crystalline Hill Country creek, I've realized the importance of low light to these fish. They simply don't like sunlit water. In fact, they tend to avoid areas that are normally bright during a particular time of day even when those areas have become uncharacteristically dark during that period.

Take this example. One of my former long-time warmouth honey holes was the canal along Interstate 55 just south of Ruddock. It was ideal for fishing from my canoe, and its western shoreline was littered with ideal structure for these fish. It was usually brightly sunlit during the day. Of course, in late afternoon it was deeply shaded.

However, on a particular mid-afternoon trip there it was quite dark as the result of some prolonged and violent thunderstorms, complete with hail. After waiting that unpleasantness out in my truck, I began fishing around 4 p.m. Although the canal never saw the first hint of sunlight that entire afternoon, it was well after 6 o'clock before I caught my first gog—the first, I recall, of a very nice mess.

That event may be a bit extreme, but don't underestimate the low-light factor. Let me stress the point that low light appears to be much more critical with warmouths than with bass, crappie and the like. So if you have your heart set on fresh goggle-eye fillets for supper, don't get discouraged from a lack of action and go home early, even if the afternoon has been cloudy or even rainy! Fish as late as you possibly can, and feast tomorrow!

Although I have caught plenty of gogs on various bass-sized lures as well as natural baits, most have fallen to mini-jigs fished some two feet beneath a small cylindrical perch-float. While I have fished that rig on a light spinning outfit with success, I prefer a fly rod for several reasons.

First, I can jig-fish with a fly rod in one hand while controlling the boat with a short paddle in the other. Can't do that too well with a spinning outfit! Also, flipping with the fly rod seems to be more accurate than casting with the spinning rod, and placing the jig very near a piece of woody structure is usually the desired end. However—and I'd bet some of you might have already guessed it—the fly rod allows me to substitute a popper for the jig when the time seems right for some rowdy surface entertainment!

The poppers I have relied on for decades might seem a bit large for a variety of bream, but the aforementioned incidents with gogs and the Devil's Horses convinced me long ago that these fish will eat (or try to eat) some pretty big prey. My favorites are products of the late and great Tony Accardo of Baton Rouge: size 6 "Feathertails" and "Spooks," both in either yellow and black or chartreuse and black. Gogs love 'em!

With poppers, as with bait or jigs, you should concentrate on woody structure, preferably with grass nearby, in deep shade late in the afternoon. After impact give one a soft pop, let it sit for 10 seconds or so, then give it a little twitch, continuing the sequence until the fly is out of the assumed strike zone. Take your time. A second cast to a promising target is recommended, no matter if the first one got a fish or drew a blank, but after that you should try another spot. You'll find 'em! And they will provide you with some grand entertainment!

If you just can't wait until tomorrow for some of those fast-fried fillets for supper, give Momma a ring on the cell phone and ask her to grease up the skillet. Later that evening you are going to treat her to a great meal, compliments of the wonderful warmouth.

Recognized as pioneer of saltwater fly-fishing in Louisiana, Pete Cooper Jr. is the author of Fly Fishing the Louisiana Coast. He is a member of the Louisiana Sportsman's Hall of Fame and is a regular contributor to Louisiana Conservationist.

Warmouths will unabashedly strike 6-inch purple plastic worms.

Warmouths make an excellent freshwater fly fishing target during the warm months.

AGENTS OF *Change*

the evolving role of wildlife and fisheries enforcement agents

LITTER VS. THE OUTDOORS

By Lt. Eric Stokes

As spring and summer mix, outdoor enthusiasts use the waterways, wildlife management areas and other outdoor recreation spots throughout the state. A common eyesore known to most of the areas is litter. Litter ranges from small chip bags to empty beer cans to old washing machines.

Simple littering can be punished by fines starting at either $75 or eight hours of community service. An example of simple littering is paper or other debris flying out of the bed of a pickup truck onto the road.

Intentional littering involves intentionally disposing of litter in a public place or on private property not owned by the offender. Intentional littering can result in fines of $250 and hours of community service in a litter abatement program. Gross littering is an example of intentional littering that involves large amounts or sizes of items being dumped. Penalties can be more severe for gross littering violations.

Littering appears to be a habit or a mindset in most cases. Throwing that empty beer can in the bushes during a bank fishing trip is no big thing in some people's minds; they might think, "It looks like everyone else is doing it here." That is how litter happens—one person at a time.

The fight against litter has been happening in Louisiana for many years now. Last year, 502 litter cases were made in Louisiana by Louisiana Wildlife and Fisheries Enforcement Division agents alone. Many of these were gross littering cases. Because a large number of people are involved in numerous outdoor activities during the spring and summer, the majority of litter cases are made in those months. The banks and shorelines of favorite fishing spots are commonly covered with unsightly food wrappers, cans, bottles, plastic foam worm boxes, fishing string and almost anything you can imagine.

A common example of a littering case is the bank fisherman who leaves three or four empty aluminum cans, a paper bag and an empty worm box behind. Also there is the boater who, after drinking the last swallow, leans over the edge of the boat, fills the can or bottle with water and then simply lets go.

Spring cleaning also contributes with unwanted household items that are dumped in wooded areas, spillways and even wildlife management areas. Agents contribute more time and effort now than ever before to catching litter bugs. The efforts of enforcement agents have paid off with some heavy fines given to violators hopefully serving as deterrents.

In addition to being unsightly and nasty, litter can also be a health hazard. How many times have we heard of people wading in a creek or edge of an area lake and cutting their feet on a broken bottle or rusty can? Many times this results in trips to the hospital, doctor bills, medication and lost work time—all because of trash that someone else left behind.

You might be surprised at the actions of those who litter. It seems that the further they throw their unwanted object, the more innocent they feel. And others just make the simple drop over the spillway wall while looking the other way. There are also those who dig a hole on the sandbar, throw their litter in the hole, then cover it with sand. This seems to give the impression, "If we bury it, it's gone." This rationalization couldn't be more wrong. It's all litter and those who are caught will be penalized accordingly. As sneaky as they try to be, many litterbugs have been caught conducting the acts mentioned above.

The public can help with this fight against litter by calling 1-888-Lit-R-Bug (1-888-548-7284) or by calling a local official. Organizations such as Keep Louisiana Beautiful have strong campaigns to reduce the litter problem in Louisiana. It will take education, enforcement and cleanup over a period of time for us to have a cleaner, safer and more attractive state.

Photo by Joel Courtney

ALEXANDER ST. FOREST WMA

Wildlife
MANAGEMENT AREA

Alexander State Forest Wildlife Management Area (WMA) is located in south central Rapides Parish about 10 miles south of Alexandria off U.S. Highway 167 and one mile east of Woodworth.

The Louisiana Department of Agriculture and Forestry owns the 8,092-acre tract, which is managed as commercial forest with an emphasis on experimental forestry techniques. Indian Creek Lake, a 2,600-acre reservoir, is located on the area along with a 300-acre recreation and camping area.

Indian Creek Lake produced the first lunker bass of 2006 for the Louisiana Department of Wildlife and Fisheries (LDWF) Lunker Bass Program. Two Forest Hill natives caught a 14.43-pound largemouth bass on a shiner-baited trotline. The fish was turned over to the Booker Fowler Fish Hatchery, which is one of two LDWF operated fish hatcheries adjacent to the WMA. These hatcheries are the primary source of fish for the statewide stocking program. Booker Fowler Fish Hatchery has a visitor center and offers hatchery group tours by appointment. For hatchery information call 318/748-6914.

Alexander State Forest WMA features a 2.5-mile hiking trail that offers good viewing areas of birds that include the endangered red-cockaded woodpecker, several species of raptors and herons, brown-headed nuthatch, summer tanager, pine warbler, eastern wood-pewee and tufted titmice.

Indian Creek Lake also offers two boat ramps. Fishing, water-skiing and swimming are the most popular recreational uses. Camping facilities and trailer and tent accommodations are available with electricity, water, bathhouses and swimming areas. A fee is charged for the use of these facilities. For camping information, call the Indian Creek Recreation Area at 318/487-5058.

Booker Fowler Fish Hatchery employee Scott Delaney with the 14.43-pound largemouth bass caught in February at Indian Creek Lake by Forest Hill natives Earnest Johnson and Johnny Ray.

LDWF owns and operates an education center on a 17-acre site within the WMA. Two shooting ranges are located on the grounds. A 100-yard rifle and pistol range and a shotgun range are used in education programs and also available to the public during specified times. Information on range hours and fees is available at 318/484-2212.

Alexander State Forest WMA has a forest overstory that is predominantly loblolly pine with scattered stands of longleaf and slash pines. Much of the timber is managed as pine plantations, and creek drainages have been maintained. In addition, red oak, blackgum, sweetgum, hackberry, beech, water and willow oaks are widely scattered over the forest. Game species available for hunting include deer, squirrel, rabbit, quail and waterfowl. The featured species on the area is white-tailed deer. Herd density is good, and antler quality and body weights are typical of piney woods sites. Hunter success during the either-sex muzzleloader hunts is generally above average.

To get to Alexander State Forest WMA from Alexandria, travel south on U.S. Highway 165 to Woodworth. Then turn east at Woodworth and take the first blacktop road to the right. Follow the signs to the Indian Creek Recreation Area.

Additional information on Alexander State Forest WMA may be obtained from LDWF by calling 318/487-5885.

LDWF FORESTER WINS BIRD CONSERVATION AWARD

KENNY RIBBECK, A CERTIFIED forester and LDWF biologist programs manager for the Wildlife Division's Forestry Section, received a "2005 Partners in Flight National Award" for bird conservation at the 71st North American Wildlife and Natural Resources Conference in Columbus, Ohio, on March 23.

As a forester, Ribbeck has helped create better habitat for avian species by managing the forested lands with wildlife in mind. He coordinated avian surveys on nearly all WMAs to measure the effects of forest management actions on bird species compared to unmanaged forests.

Ribbeck's duties for LDWF include managing 462,000 acres of department owned lands across the state. Over 95 percent of these acres consist of bottomland hardwood forest located within the lower Mississippi, Red and Pearl River Alluvial Valleys.

He has helped oversee LDWF's Bottomland Forest Restoration Program, which has restored approximately 25,000 acres of agricultural land into forested land on LDWF WMAs.

Ribbeck is the chairman of the Forest Resources Working Group and also provides forest and wildlife management assistance to private landowners.

After graduating from Louisiana State University with a master's degree, Ribbeck joined LDWF in 1984. He was named "Professional Employee of the Year" by LDWF in 2003 and "Conservationist of the Year" by the Central Louisiana Chapter of Safari Club International. Ribbeck was promoted to the position of forest supervisor in 1987. The Forestry Section of LDWF has grown over the past 20 years and today Ribbeck has a staff of eight foresters who manage the WMA forests.

For the latest on LDWF news and events, visit our Web site at *wlf.louisiana.gov.*

LOWA HONORS HUSBAND AND WIFE WITH PRESTIGIOUS CONSERVATION AWARD

THE LOUISIANA OUTDOOR Writers Association (LOWA) presented its Arthur Van Pelt Award to Ron and Jackie Bartels of Schriever in recognition of a lifetime commitment to conservation.

The couple has been integrally involved in numerous conservation organizations and causes, including Ducks Unlimited, Safari Clubs International (SCI) and LDWF hunter education programs.

Jackie Bartels has been very involved in the "Becoming An Outdoor Woman" program at LDWF, and she and her husband have been active supporters of the LSU Sea Grant "Ocean Commotion" youth education day at LSU. They've organized members of their Louisiana Chapter of SCI to bring taxidermy specimens of marine and aquatic animals to the event, and have lectured on the natural history of the specimens and the role of regulated hunting in the conservation of species.

In addition, the Bartelses have been instrumental in garnering support from SCI for the LOWA Youth Journalism Contest. It's been obvious over the years that the Bartelses are passionate about education.

Van Pelt was one of the first nationally recognized outdoor writers in the state in his long-time job as outdoor editor of the *Times-Picayune*. In addition, Van Pelt was an honored environmentalist and conservationist in many causes long before they became recognized by the general public. Van Pelt was also one of the founders of the Louisiana Outdoor Writers Association.

LDWF's Kinler Named Professional Conservationist of the Year

Noel W. Kinler, a biologist program manager in charge of LDWF's Alligator Research and Management Program, was honored as the "Professional Conservationist of the Year" at the 42nd Conservation Achievement Recognition Banquet held in Alexandria on March 4 during the Louisiana Wildlife Federation's 67th Annual Meeting.

Kinler, who works out of the New Iberia office, has spent most of his 27-year LDWF career as a fur and alligator biologist and has been in his current position for the past six years.

The American alligator is one of Louisiana's most recognized symbols of wild nature. In addition to its status as one of Louisiana's most charismatic species, it also is the basis of a multi-million-dollar industry. Its former status as an endangered species, international regulations governing the trade of its parts, and the relationship between wild alligator populations and the alligator farming industry, make managing and conserving the species a challenge.

Kinler has conducted LDWF's annual alligator nest surveys for the past 26 years by flying helicopter routes through the marsh to index population abundance. Last year he secured federal funds for alligator disease research and was appointed representative to the Convention on International Trade of Endangered Species, representing the Southeastern Association of Fish and Wildlife Agencies. He is a member of the International Union for the Conservation of Nature, Crocodile Specialist Group, where he is the Regional Vice Chairman on the Steering Committee for North America. He has also authored or co-authored 50 scientific papers dealing with alligators, furbearers and wetlands research.

LDWF Secretary Dwight Landreneau congratulates Noel Kinler (right) on his award and a job well done.

Hurricane Rita's Impact on Freshwater Fisheries in SW LA

Hurricane Rita affected more than just humanity in southwest Louisiana when she roared ashore. Hardest hit areas included Vermilion and Cameron parishes below the Gulf Intracoastal Canal.

Coastal areas under water control management were inundated with saltwater. Strong winds caused sediment turnover, stimulating decaying organic matter and depleting oxygen levels.

The drought before Rita and lack of significant rain left vast areas of salt water with no chance of dilution. Pooled salt water had adverse affects on freshwater marsh vegetation as well. The decaying vegetation led to anoxic conditions that also killed both fresh and salt water fish.

Inland Fisheries is currently developing a statewide resource recovery plan for damaged areas. Division biologists are sampling area waterways to monitor habitat and resource recovery. As habitat recovers, LDWF is prepared to initiate a stocking plan if needed.

Custom-made Longbow Presented at Deer Study Group Meeting

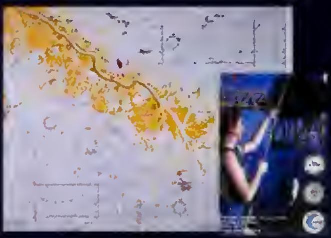
The 29th annual meeting of the Southeast Deer Study Group was held in Baton Rouge on Feb. 26-28.

The meeting, hosted by LDWF Wildlife Division, registered in excess of 360 wildlife professionals, land managers, college students, professors and hunters interested in deer management.

Door prizes were highlighted by a commemorative custom longbow, built and donated by LDWF DMAP coordinator Emile P. LeBlanc. The bow was signed by Gov. Kathleen Babineaux Blanco and LDWF Sec. Dwight Landreneau. The winning ticket belonged to Kelly E. Douglass, Captive Cervid Program Leader from North Carolina.

The longbow was a combination of exotic zebrawood and bamboo grown near Shreveport. Back laminations were signed by Gov. Blanco and Sec. Landreneau and laminated under clear fiberglass. The handle and arrow rest were wrapped with tanned alligator hide, and the limb tips were overlayed with zebrawood and capped with deer antler. Leblanc also built the bowstring and added string silencers made from tanned Louisiana beaver fur.

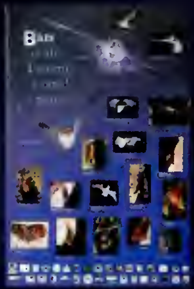
LOUISIANA Conservationist



Marine Recreational Fishing Maps

Six full color maps indicate offshore/inshore rig locations, launches, marinas, fishing tips and species identification.

#1-Venice to Fourchon
#2-Fourchon to Point Au Fer
#3-Lake Pontchartrain to Chandeleur Sound
#4-Sabine Pass to White Lake
#5-White Lake to Atchafalaya Bay
#6-TX/LA coast to LA/MS coast



Bats of the Eastern United States Poster

Full color photographs with scientific and common names. Bat facts listed on the back. Bat house instructions included.
$2.50

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Any combination:

1-2 posters	$4.00 each
3-6 posters	$3.50 each
7 or more	$3.00 each

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5" x 7" on waterproof paper
$7 per set (one of each poster)
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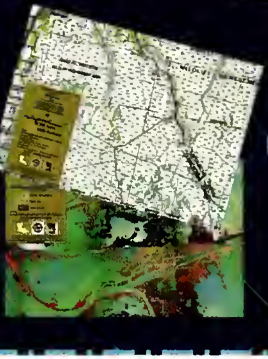

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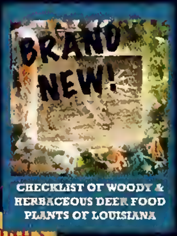
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LA Cuisine
THE LOUISIANA KITCHEN

FRESH TUNA SALAD

8	oz. fresh yellowfin tuna
4	Tbsp. crab boil
2	Tbsp. salt
2	Tbsp. onion, minced
1	Tbsp. celery, minced
2	Tbsp. capers
1/4	c. mayonnaise
2	Tbsp. Dijon mustard
1	Tbsp. Creole mustard
1/2	tsp. Tabasco hot sauce
2	tsp. parsley, chopped
1	Tbsp. green onions, sliced
1/2	tsp. fresh dill, chopped

Combine crab boil and salt with one quart of water. Poach fresh tuna for four minutes. Remove from liquid and let cool.

In a mixing bowl, gently combine tuna with the following: onions, celery, capers, mayonnaise, Dijon mustard, Creole mustard, Tabasco hot sauce, parsley, green onions and fresh dill.

Serve chilled on a bed of fresh greens. Garnish with sliced avocado, tomatoes and lemons.

Great with a side of seafood bisque and hot garlic bread!

Recipe provided by Parrain's Seafood Restaurant in Baton Rouge. Check out their full menu at www.parrains.com.

Photo by David Humphreys

Louisiana Iris
Iris giganticaerulea
Official State Wildflower

WILDLIFE & FISHERIES DEPARTMENT LOUISIANA

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